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ABSTRACT

This monograph reports on an inquiry into the likely distributional effects of recent reductions in the payment of unemployment insurance to recipients of pension and social security benefits and its potential effects on labor market and consumption behavior of older people. An introductory chapter provides facts about unemployment insurance and older people in the United States and elsewhere. Chapter 2 examines the effects of unemployment insurance on the distribution of income among older people and the potential impact of the pension restriction embodied in the 1976 Unemployment Insurance Amendments. It is noted that these restrictions will impinge chiefly upon those households in the upper half of the income distribution among older workers. Chapter 3 examines how much unemployment insurance serves to prevent severe hardship among older recipients. It is reported that better-off older workers have access to prior savings and borrowed funds, and cutbacks in their receipts of unemployment insurance would not appear to have a severe detrimental impact on their living standards. The fourth chapter considers the relationship between receipt of unemployment insurance benefits and subsequent retirement and labor force status. A summary of the distributions of income and unemployment insurance benefits in the retirement history survey subsamples is appended. (LRA)

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UNEMPLOYMENT INSURANCE *and the* OLDER AMERICAN

Daniel S. Hamermesh

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The Author

Daniel S. Hamermesh was born in 1943. He received his B.A. from the University of Chicago in 1965 and his Ph.D. from Yale in 1969. He taught at Princeton from 1969-73, and has taught at Michigan State University since 1973, with the rank of professor since 1976. He is also a research associate of the National Bureau of Economic Research. In 1974 and 1975 he served as director of the Office of Research in the Office of the Assistant Secretary of Labor. His published work includes books on manpower training, labor in the public sector, and unemployment insurance, and he has published articles on such topics as wage inflation, unemployment insurance, labor demand, and the economics of unionism.

"A person who has some retirement income can also draw unemployment compensation under present circumstances. Corrective legislation should be enacted, because I believe it is the intent to take care of those unemployed who are in real need, but not to give windfalls to people who are not actually, or morally, at least, if they are legally, entitled to it under present laws."

Cong. Clarence Brown,
Cong. Record, 87:1, 2940, March 1, 1961

"Millions of people in the country today draw pensions, most of which are inadequate. If such persons were caught up in the present unemployment situation, some of them would have that unemployment compensation reduced by the amount of their pension payments. If anyone can show me 100 cases in which the persons involved are getting rich out of the unemployment compensation, I will apologize publicly to the Senate."

Sen. Hubert Humphrey,
Cong. Record, 87:1, 4197, March 16, 1961

"Gold had chipped in for the good used car in which Gussie drove them about in Florida. To Sid, Julius gave all the credit. 'Sid fixed it so I would first get my unemployment insurance, then my Social Security.' "

Joseph Heller, *Good as Gold,* 1979

Acknowledgments

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Foreword

In April 1980, federal legislation took effect requiring a dollar-for-dollar reduction in payment of unemployment insurance benefits to recipients of pension and Social Security benefits. This study is an especially timely inquiry into the likely distributional effects of the change and its potential effects on labor market and consumption behavior of older people.

The aging of the U.S. population will have an increasingly important effect on federal transfer programs such as unemployment insurance. Dr. Hamermesh analyzes a number of policy issues within an economic framework and addresses his findings to current discussion of income maintenance policy for the elderly.

Facts and observations presented in this monograph are the sole responsibility of the author. His viewpoints do not necessarily represent positions of the W. E. Upjohn Institute for Employment Research.

E. Earl Wright
Director

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Chapter 1
Unemployment Insurance and Pensioners—Provisions and Problems

Introduction

The debate typified by the epigraph to this volume was over provisions proposed as part of the temporary extension of the potential duration of unemployment insurance (UI) benefits during the 1961 recession. While pensioners were not denied regular UI benefits, the compromise legislation did provide that extended UI payments should be reduced by the amount of pension benefits (but not Social Security old age benefits) received. This debate spurred a rash of studies by state UI research groups on the extent to which pensioners receive UI benefits, and a summary of these studies with a consideration of the policy issues was produced by Merrill Murray (1967).

The issue appeared dead between 1967 and 1975: no state studies were done on the subject, and, while bills were occasionally introduced on it in Congress, none even led to hearings, much less to floor debate. In 1976, though, after substantial hearings and debate, and as part of a complex series of changes included in the UI Amendments of 1976, a federal standard of a dollar-for-dollar reduction of UI payments against all retirement income was enacted.[1] The debate over this restriction paralleled that in the

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[1] P.L. 94-566. The provision was not included in the House bill, but was added by the Senate Finance Committee, approved by the Senate and by the House-Senate Conference Committee. It states, "the amount of compensation payable to an individual for any week which begins after September 30, 1979 [later amended to March 31, 1980], and which begins in a period with respect to which such individual is receiving a governmental or other pension, retirement or retired pay, annuity, or any other similar periodic payment which is based on the previous work of such individual shall be reduced (but not below zero) by an amount equal to the amount of such pension, retirement or retired pay, annuity or other payment, which is reasonably attributable to such week."

1961 debate, though in 1976 there appeared to be a greater awareness, even on the part of liberal legislators, that abuses occurred. For example, one stated:

> [It] should be clear that it is unconscionable and an aberration of our unemployment compensation laws that some retirees with large annuities or pensions also are permitted to receive unemployment compensation benefits. The public perceives this as a rip-off of Government funds, and justifiably so. . . . [However], it does not make good sense or good public policy to completely cut off from the unemployment compensation system a retiree who receives $5 a month from a pension or annuity.[2]

The 1976 legislation was initially intended to become effective in 1979, "permitting the National Commission on Unemployment Compensation [created in the 1976 Amendments] opportunity for a thorough study of this issue and the Congress to act in light of its findings and recommendation."[3] (Because of delays in organizing the Commission, the effective date of the restriction was later delayed until 1980. Efforts were also made to prevent the restriction from ever taking effect or to weaken its impact, but it became effective in April 1980.)[4] It is this restriction on the simultaneous receipt of retirement benefits and UI and the stated need "for a thorough study" that provide part of the motivation for this volume.

The need for a study is underscored by the lack of available information on the distribution of UI payments among the elderly, among pensioners in particular, and on how UI affects their behavior. Discussions of the merits of restricting UI payments to pensioners have often ignored what would seem to be basic issues. The effect of such a restriction on the distribution of income within the entire population and among older workers alone has not been considered. Potential effects on the ability of older workers to maintain living standards at or above some minimum level have also received no attention. Nor has the effect of such a restriction on the operation of the labor market, particularly on the retirement decision of older workers, been considered in discussions of this policy. Instead, the recommendations have been based either on arguments regarding the proper role of federal legislation in setting standards for state UI laws, or on arguments that the restriction would introduce needs considerations into a program that has been a social insurance rather than a welfare program.[5]

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[2] Senator Gaylord Nelson, *Congressional Record*, 94:2, 17016, September 29, 1976.

[3] House Conference Report No. 94-1745, page 16.

[4] In June 1979, Congressman Corman of California introduced H.R. 4464 to repeal the federal restriction on the receipt of UI by pensioners. His bill received substantial support from groups of retired persons, from the AFL-CIO, and from representatives of the Department of Labor in hearings held in September 1979.

It is hoped that this volume will fill part of the void. It should also shed some additional light on the more general, and increasingly important, issue of retirement behavior. With the age structure of the population of the United States tilting toward people 55 and over, the neglected area of the economics of the elderly needs to be considered in much greater depth. As a byproduct of the general discussion of UI and the elderly, and of examination of the economic merits of restricting UI payments to pensioners, the findings of this study should also enhance the existing knowledge of the economic situation of the older population. Before delving into the particular studies that comprise the bulk of this volume, though, the way in which state UI laws treat the issue and the general outcomes of those laws among the older population need to be considered.

Facts About UI and Older People in the U.S. and Elsewhere

As table 1.1 shows, persons 55 years and older comprised nearly one-sixth of all UI recipients in a recent year. This was nearly double their representation among the unemployed counted in the monthly Current Population (household) Survey (CPS) used to compute the national unemployment rate. The figures are not quite comparable; older workers do account for a greater fraction of CPS unemployment among experienced workers than is implied by column (2) in the table. However, after appropriate adjustments are made, it may be inferred that workers 55 and over represented about 10 percent of unemployed job losers, job leavers, and labor force reentrants.[6] Comparing this to their share of insured unemployed, it may be inferred, though by no means has it been proven, that the UI system is paying benefits to a disproportionate number of elderly individuals who do not consider themselves to be unemployed by the commonly accepted criteria contained in the household survey. This finding underscores the importance of the problem of payment of UI benefits to the older population, and points out the necessity of more detailed analysis of the issue such as is contained in chapters 2 - 4 of this volume.

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[5] For example, the National Commission on Unemployment Compensation (NCUC) disposed of its obligation to consider the issue by arguing that the federal restriction should not be allowed to become effective: (1) Because no other benefit standards at the federal level have been adopted; and (2) Because it implies viewing UI as a needs-based program (NCUC, *Interim Report*, November 1978, pp. 95-100). The Commission does not appear to have engaged in any formal study of this issue.

There are no data on the amount of UI benefits received by individuals 55 and over. It is likely, though, that around $1.5 billion of the benefits paid in 1978 accrued to older workers, as this figure amounts to one-sixth of the $9 billion in UI payments for that year. Since base-period earnings, and thus weekly benefits, are likely to be at least as high among older recipients as for the average UI beneficiary, and since duration is longer for older workers, the $1.5 billion may even be a low estimate. Further, studies by the U.S. Bureau of Employment Security of claimants of regular state UI benefits (done in conjunction with the Temporary Extended Unemployment Compensation Act of 1961) show that 7 percent of all claimants also received Old Age

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6. In 1977, new entrants to the labor force accounted for 14 percent of the unemployed in the CPS data. Assuming none of these is age 55 or over, and removing them from the totals in order to get a count of the experienced unemployed, results in an estimated 9.7 percent (8.5 x 1.14) of the experienced unemployed age 55+. This is a far smaller percentage than their representation among the insured unemployed. It may appear unusual to include unemployed reentrants and job leavers in the unemployed for purposes of this comparison, as few people in either category are likely to be among the insured unemployed. However, unlike new entrants, there is no reason to assume that older workers are less than proportionately represented among the CPS unemployed classified as job leavers or reentrants. Thus their retention in the calculation will not bias the comparison.

and Survivors' Insurance (OASI) retirement benefits, 3 percent received other retirement benefits, and 8 percent of all claimants received some form of retirement benefit. Since only 21 percent of UI claimants in 1961 were 55 or over, it may be concluded that a substantial fraction of older claimants in 1961 received some pension income.[7] This conclusion is likely to be even more valid in 1979. (Chapter 2 provides some more detailed evidence on this.) As shown below, there has been only a slight expansion since the early 1960s in the extent to which states impose restrictions on receipt of retirement income and UI benefits. At the same time, the coverage and level of private pension benefits (including those paid to government employees) and of OASI have been increasing. (Partly as a result, people are retiring earlier in life.)

That the coverage of private pension programs has increased is unquestionable. In 1965, pension recipients accounted for only 7.8 percent of individuals 55 and over; by 1974, this figure had risen to 15.5 percent.[8] (Note that this is based on individuals; clearly, substantially higher percentages of people 55 and over are in families containing persons who received part of their income in the form of pension benefits.) Beneficiaries of OASI retirement programs also increased in the same period, from 39.6 percent of people 55 and over in 1965 to 47 percent in 1974. Moreover, OASI retirement benefit amounts became much more liberal after 1970. Until that year, the average primary insurance amount never exceeded 32 percent of the average wage in manufacturing. (It was 29 percent in 1965.) By 1974 it had climbed to 37 percent, and in 1976 it was 40 percent of the manufacturing wage.[9] The 1977 Social Security Amendments, which legislated long-run stability in replacement rates, ensure that, while this rise will not continue, replacement rates will stay at the higher levels of the early 1970s rather than revert to the lower levels of the 1960s. We may conclude that both the coverage and levels of retirement schemes, both employer-based pensions and Social Security retirement benefits, have increased substantially since the middle 1960s.

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[7] Calculated from Haber and Murray (1966, p. 474) and from Department of Labor, Bureau of Employment Security, *TEUC Report*, No. U-225-5. The 21.5 percent figure is, as can be seen from a comparison with table 1.1, substantially above today's percentage. The difference is even greater than it appears; 1961 was a year of deep recession, whereas 1977 represented a recovery year, and the fraction of older workers among the insured unemployed is lower in a recession (see Hamermesh 1977, p. 22). The apparent long term decline in the representation of older workers among the insured unemployed likely has three causes: (1) The drop in labor force participation among persons 55+ in the past twenty years has meant that fewer older persons are eligible for UI if they are not at work; (2) Expansions of coverage have been to industries and firms that employ proportionately fewer older workers than industries that were already covered by 1961; and (3) A sharp rise in the fraction of youth in the population and the labor force has occurred.

[8] The numerators for these calculations are from Munnell (1977, p. 6), and the denominators are from Bureau of the Census, *Current Population Reports*, P-25, Nos. 321 and 643.

Table 1.1
Percentage of Older Workers Among the Insured Unemployed, All Unemployed, and the Labor Force, by Selected Sex-Age Categories, 1977[a]

Sex-age category	Percent older workers among: Insured unemployed[b]	All unemployed	Civilian labor force
Men			
55-59	3.9	3.6	4.4
60-64	3.3		2.8
65 +	2.8	1.4	1.9
Women			
55-59	2.7	2.8	2.8
60-64	2.1		1.6
65 +	1.6	.7	1.1
Total 55 +	16.4	8.5	14.6

SOURCE: *Unemployment Insurance Statistics*, October-December 1977 and 1978; *Employment and Training Report of the President*, 1978.

a. As a percent of the entire population in the category.

b. Fiscal year 1977.

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[9] Munnell (1977, p. 64).

The effect of these rather sudden changes is shown by the data in table 1.2. While there was little change in the relative economic position of households headed by older persons in the 1960s, there has been a steady and sharp improvement since that time in their relative incomes. This is especially true for households headed by persons 65 and over, and it has occurred despite the continued trend of a decreasing fraction of persons 65 and over remaining in the labor force. Improvements in private and public retirement income programs have clearly been the dominant factor in these changes in the economic position of older Americans.

Table 1.2
Median Income of Families Headed by Older Persons, Relative to Median Income of All Families, by Age of Household Head, 1964, 1969, 1973, 1977

	Ratio to median family income of all families:			
Age of head	1964	1969	1973	1977
All ages	1.000	1.000	1.000	1.000
55-64	1.019	1.023	1.061	1.076
65 +	.514	.509	.533	.569

SOURCE: Bureau of the Census, *Current Population Reports*, P-60, Nos. 47, 75, 97, 118.

At the beginning of the UI program, most states denied benefits to recipients of OASI retirement benefits (see Haber and Murray 1966). Over the years these restrictions were eased, so that by 1964, as table 1.3 shows, only 18 states, containing 26 percent of the covered work force, imposed any restrictions on the simultaneous receipt of OASI retirement benefits and UI payments. This changed little between 1964 and 1979: in 1971, only 14 states, containing 27 percent of the covered work force, imposed such a restriction; the figures for January 1979 were 17 states and 23 percent. Further, in January 1979 only two states, Arizona and Oregon, completely disqualified a recipient of such benefits (though Wisconsin did so, too, in certain cases); in most of the other 15 states there are provisions for prorated reductions in UI benefit payments related to the amount of OASI payments received.

Table 1.3
Summary of State UI Statutory Provisions on Pension Restrictions, 1964, 1971, and 1979

Provision	Number of jurisdictions[a]			Percent of covered employment in fiscal year		
	1964	1971	1979	1964	1971	1978
No restriction	20	19	15	32.6	29.2	22.5
Restrict old age insurance only	1	1	1	4.5	5.0	6.1
Restrict pension from base-period employer only	12	16	18	35.0	33.5	41.4
Restrict pension from any employer	2	3	3	6.7	9.8	12.9
Restrict old age insurance and base-period employer	5	3	8	3.2	2.6	7.3
Restrict old age insurance and any employer	12	10	8	18.0	19.9	9.8
TOTAL	52	52	53	100.0	100.0	100.0

SOURCE: *Comparison of State UI Laws,* January 1964; August 1971; January 1979; *Unemployment Insurance Statistics,* November 1964; July-September 1971; October-December 1978.

a. Based on UI provisions as of January in 1964 and 1979 and as of August in 1971.

The number of states that restrict the simultaneous receipt of private pensions and UI benefits has grown over the years. There was little legislation on this in the early days of the federal-state UI program, but by 1964, 31 states, having 63 percent of the covered work force, imposed some form of restriction. This changed little in the 1960s, but by January 1979, 37 states, containing 71 percent of covered employment, imposed restrictions of this sort. While restriction is thus fairly widespread, its effects may not be as important as they appear, as only two states, Arizona and Wisconsin, deny benefits to pension recipients. Further, in most other states the prorated reduction in benefits is made only for those pension receipts towards which a large fraction of the contributions has been made by the employer; even then, in most cases, only pensions from the base-period employer are restricted.

The trend of legislation in this area leads to several conclusions about public thinking on the issue. Although OASI retirement benefits have become much more liberal over the years, states appear to be continuing the "federal policy that unemployment compensation should not be denied to persons drawing federal old-age insurance benefits."[10] However, the increasingly widespread applicability of private pension plans, often noncontributory or only partly employee-financed, appears to have spurred more states to impose more restrictions on the receipt of UI benefits along with private pension payments.

The United States is among the more generous Western nations in allowing the simultaneous receipt of UI benefits and public or private retirement benefits. Two types of restriction are common in other Western countries, and in most they involve complete denial rather than just *pro rata* reductions in UI benefits. In some countries, benefits are denied to workers who have reached a certain age regardless of their current or prior labor force status. (Often the age limit is higher for men than for women.) These include Belgium, Denmark, Finland, France, Germany, Greece, Ireland, the Netherlands, Sweden, Switzerland (in some cantons), and the United Kingdom. In other countries the restriction is based on the receipt of a pension, or upon receiving a pension and attaining a certain age. These nations include Canada, Italy, and Norway.[11] As the U.S. is generally considered to have one of the less liberal panoplies of income maintenance systems, it is not clear why on this particular issue our policy is unusually liberal. It may be, though, that the politics of running 53 separate state UI programs (including the District of Columbia, Puerto Rico, and the Virgin Islands) along with a single federal old age benefit program has prevented the integration that exists in other countries where policy for both programs is set by the national government. Similarly, there may have been less concern here, until recently, about providing incentives to older workers to stay in the labor force.

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[10] Haber and Murray (1966, p. 472).

[11] This information is taken from Blaustein and Craig (1977, Table 4).

What This Monograph Does

The central portion of this monograph consists of three essays on the economic impact of UI on the older worker. Chapter 2 examines one of the equity aspects of the program, namely, the effects of UI on the distribution of income among older people and the potential impact of the pension restriction embodied in the 1976 UI Amendments. Unless we know which older people will be hurt more by the restriction, all the arguments about the need to maintain the program's integrity as social insurance or to maintain a proper federal-state structure will have little impact. So too will the usual economists' arguments about the potential disincentive effects the program may currently contain.

Chapter 3 examines a different aspect of the equity impact of UI on the older population. Rather than considering how it affects the relative economic standing of members of the population, it examines instead how much UI really serves to prevent severe hardship among older recipients. In this context, the analysis focuses on whether and to what extent the program prevents the *individual* older worker from being forced to curtail his purchases sharply when he experiences a spell of unemployment. This analysis can inform us whether UI is needed by the older population, or whether it merely enables most older recipients to add a few extra consumption items not part of the basic commodities required for a minimally acceptable standard of living.

Chapter 4 considers the relationship between receipt of UI benefits and subsequent retirement and labor force status. While Murray (1967) did summarize the state studies of this relationship, none of those studies held constant for other factors that affect people's decisions to retire. Moreover, none contained a nationally representative sample of older workers, making the results obtained in those studies somewhat difficult to generalize.

In this examination of the issue, other factors that have been shown to affect retirement decisions are accounted for, and the analysis is based on a national sample of UI recipients and other older people.

Each of the three chapters uses as the basis for the empirical work the data from the Retirement History Survey. This survey, conducted by the Bureau of the Census for the Social Security Administration, was based on persons age 58-63 in 1969. The sample was representative of the older population in the groups of married men, unmarried men, and single women, as it included all such persons in the most recent discontinued Current Population Survey (CPS) rotation groups. Nineteen such groups were used in order to produce a sufficiently large sample; since the CPS is representative of the population, the Retirement History Survey is representative of older men and unmarried older women.

The initial wave of successful interviews included 11,153 persons, of whom 60.7 percent were married males, 10.7 percent unmarried males, and 28.6 percent single females. Exactly 90 percent of the respondents in 1969 were white; 21.4 percent had a high school diploma only, and 16.5 percent had completed at least one year of college. Each surviving respondent was to be reinterviewed biennially through 1979. When the work embodied in chapters 2 - 4 was done, data were available for 1969, 1971, and 1973. For each wave, interviewing was done between April and June of the survey year. Because of death and other causes of sample attrition, only 9,924 people remained in the sample in 1971 and only 8,928 in 1973.[12] Each of the three essays uses a subsample of the main survey in which only those households or individuals are included for whom all the required data are available. In each essay, the data's validity is discussed by comparing characteristics of the subsample to those of the entire sample. In no case did this comparison suggest that the subsamples were not representative.

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[12] A description of the survey is contained in Irelan *et al.*(1976). Information on sample attrition and more detailed problems with the data are discussed in the tape documentation available from the National Archives.

While the questionnaire used in the survey is not so complete on matters of prior earnings and job-related issues as those in several other surveys used by economists, it is unique in having both detailed data on retirement-related issues and data on income by source and expenditure by type.[13] Moreover, it is also unique in its restriction to a narrow age cohort of older workers. As such, it provides the best available source of information with which to analyze the role of unemployment insurance in the lives of older Americans.

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[13] These include the National Longitudinal Surveys, conducted by Ohio State University, and the Panel Study of Income Dynamics, conducted by the University of Michigan.

Chapter 2
Pensions and Unemployment Insurance: Effects on Income Distribution

Introduction

This chapter focuses on the distribution of unemployment insurance (UI) benefits among older Americans and the effects of this transfer on the distribution of income. There has recently been an upswing in interest among policy analysts in the effect of UI and other income maintenance schemes on the distribution of economic well-being, as measured by total income. Since such programs are aimed at least partly at equalizing the income distribution, this interest seems well focused. In the UI area, Feldstein (1974) presented data that he claimed indicated UI aided middle- and upper-income families and thus was disequalizing. Hamermesh (1977) showed that these data nonetheless imply that UI payments make the distribution of incomes more equal, though this does occur because they aid middle-income, not lower-income families. Classen (1977) and Feldstein (1977) present evidence from other data sets that corroborates this interpretation.

All of the available studies on the distributional effects of UI are based on data sets that represent random samples of the entire U.S. population. Their comparisons of income distributions may thus be misleading, for they are based on differences in current incomes among people of different ages, rather than on differences in the present values of income over an entire lifetime.[1] Because this study uses a data set that contains individuals of roughly the same age, that problem is circumvented.

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[1] Taussig (1973) and Paglin (1975) have shown that adjusting income distributions to account for life-cycle differences produces substantial changes in estimated measures of inequality.

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The sample of older workers also makes it possible to examine more closely the potential impact of the recently enacted federal standard that reduces UI benefits by one dollar for each dollar of retirement benefits the individual receives. This essay examines how much it is likely to reduce the incomes of a typical group of older Americans, and how the income reductions are distributed across income groups. The only available study of this problem, Ehrenberg, Hutchens, and Smith (1978), finds that the restriction will sharply reduce the equalizing effects of UI benefits. However, because that study included individuals of all ages, its result was guaranteed: anything that reduces the incomes of older workers will increase inequality in the population as a whole, since older workers have lower-than-average incomes because of aging effects and smaller investments in education and training. Analysis of this question using the sample of older workers should avoid this problem and produce better estimates of the effect of this restriction on income inequality among people who differ only by income, not by both age and income.

This essay first considers the characteristics of the persons included in subsamples constructed from the Retirement History Survey. Next, it examines how many of their households would have suffered reduced benefits had the federal restriction been in effect, and how large the reductions would have been. It then examines whether UI benefits make the distribution of incomes across households more or less equal, and how the restriction would have affected the income distribution within this population subgroup.

Data and Methods

The Retirement History Survey contains detailed data on amounts of income received each year, by source, for each household member, so that the distribution of aggregate income can be determined and the impact of reductions in UI benefits that are linked to the receipt of pension income can be examined. Because the data on incomes by source are very unreliable for 1969, most of the work is based on the data from the 1971 and 1973 interview waves (1970 and 1972 incomes).

Incomes of households are examined, not of individuals. This is done because it is the household that is the primary consuming unit for which economic welfare should be measured. In order to assure comparability of the sample between 1971 and 1973, only the 8,928 households that were in the sample in both years were included in the analysis. Furthermore, in each year, some of the data on one or more of the income flows were missing or coded in a way inconsistent with the tape documentation, and additional observations were deleted from the sample for these reasons. After the deletions, the sample consisted of 6,300 households in 1971 and 6,556 households in 1973, roughly three-fourths of those available from the households still in the sample in 1973, but only 60 percent of those that started in the first wave of this longitudinal survey. A combined subsample of 4,862 households for which data are available on income flows by type for both 1970 and 1972 incomes was also formed.

As noted in chapter 1, the Retirement History Survey (RHS) is a representative sample of the population of older workers. Because the data on income by source are incomplete, it is necessary to use subsamples from the RHS for the analyses in this chapter. Are these subsamples still representative of the older population? Two considerations suggest this question should be answered in the affirmative. First, as shown in the next section, both the fraction of households in the subsamples that have UI as part of their incomes, and the fraction UI represents in total income, appear quite close to the respective values for the entire population. Second, average household income in 1970 in the first subsample was $8,045, and in the second subsample in 1972 it was $8,101. This corresponds fairly closely to national statistics for the relevant population.[2]

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[2] We use data on male household heads with wife present, unrelated males and unrelated females, from *Current Population Reports*, Series P-60, No. 80, Table 17, and No. 90, Table 19. Using the Retirement History Survey weights for these three groups, we find that, among consuming units in which the head (or single individual) was 55-64, income was $9,591 in 1970. Our sample was somewhat older than the average person 55-64, so this figure corresponds reasonably well to our sample average, especially considering the weighted population average was $5,437 for persons 65 and over. In 1972 the weighted average for the three groups for household heads (or unrelated individuals) 55-64 was $10,811. This is far above our average, but by 1972 the persons in our sample were between

Household income is constructed as the sum of incomes from all sources for all household members.[3] In order to analyze the potential impact of the pension restrictions, each household member's income from UI benefits was reduced by an amount equal to his or her pension and Social Security benefits, with the maximum reduction equal to the total UI benefit actually received. This dollar-for-dollar reduction in UI benefits captures the changes that result from the legislative restriction, a reduction that cannot decrease UI benefit income below zero. For each household in the sample, total income in the presence of the restriction would have been the sum of each member's non-UI income and the UI benefits left after the restriction is accounted for.

As of January 1979, a number of states had reduced UI benefits if the claimant received certain pension income or, in a few cases, Social Security retirement benefits. The data on UI income reported in the Retirement History Survey will, for individuals in those states, already reflect the reduction in UI benefits that occurred because of restrictions imposed in state legislation as of the time of the surveys. The simulations, therefore, show only the net impact of imposing the federal restriction contained in the 1976 UI Amendments *in addition to* the state restrictions. Thus, for example, if it is found that the net effect of the federal restriction will be to reduce UI payments to older workers by 50 percent, one may be sure that the total effect—of the prior state and the new federal restrictions—exceeds 50 percent. Similarly, if it is found that 30 percent of older workers receiving UI benefits

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61 and 66, and their income would be much farther below that of the average person 55-64. Indeed, their income appears to be a fairly close approximation to what must be the population mean when one considers that the weighted average for the three groups in the category age 65 + is $6,405.

[3] The original data contain a limit on income by type of $50,000 for each recipient as well as $50,000 on each reported aggregation of income. Thus, while our procedure of summing all reported income flows to obtain income aggregates rather than relying on the aggregate figures in the data should avoid part of the underreporting problem, it does not completely vitiate the problem. Nonetheless, in the age cohort used, and for the years 1970 and 1972, it is unlikely that very much income received by households in the sample is missed by our analysis. Certainly, given limits on UI benefit maxima, no UI benefit income will be missed.

also received retirement income, it may be concluded that a greater fraction of UI recipients would have received both types of income had there been no state restrictions.[4]

The estimates of the net impact of the federal restriction may be overstated, since the data reflect twelve-month totals of pensions, UI benefits and other income, yet the restriction is based on receipts of UI benefits and pensions within one week. Someone in the sample could have received UI benefits from January through June and pension income from July through December. The federal restriction would not affect him, yet in the calculations his UI benefits would be reduced dollar-for-dollar.[5] All that can be done is to note that this will cause an overestimation of the total effect, but not the distributional impact of the restriction.

Total Effects of the Pension Restriction

Before examining the effects of the pension restriction, it is necessary to consider whether the estimates of UI income in the subsamples are consistent with the known aggregates of UI benefits paid out in the two years covered by the survey. Table 2.1 presents some of the characteristics of the subsamples in each of the two years. Roughly 4 percent of the households have income from UI in each year, but the average UI income per recipient household is much higher in 1972 than in 1970. UI income as a fraction of total income in the subsample increased from .36 percent in 1970 to .56 percent in 1972. This increase is far in excess of what can be explained by the growth in weekly benefit amounts, the expansion of coverage, or reduced eligibility requirements. Between 1970 and 1972, the average weekly benefit paid under the UI program increased by 11 percent, far less than the 64 percent increase ($695 to $1,143) in UI incomes per recipient household indicated in table 2.1.[6] Further, total UI benefits in 1970 accounted for .48 percent of personal incomes nationwide; in 1972 they accounted for only .53 percent.[7] (This increase in UI as a fraction of total incomes is likely due to the lingering effects of the 1970-1971 recession; aggregate unemployment was 4.9 percent of the labor force in 1970, 5.6 percent in 1972.) While these figures are within the range of those in the third row of table 2.1, they do not show the same large increase. There are two possible reasons for this discrepancy. First, the older unemployed workers in the sample (and, by inference, older unemployed workers in general) experience sharply lengthened spells of unemployment as they near retirement age. The constancy of the percent of households receiving UI benefits in each year suggests that the increased importance of this income source as the cohort ages is not produced by any increasingly widespread receipt of UI. Second, Extended Benefits (EB) were instituted between the two survey years. Since these only accrue to workers with long average durations of unemployment, and since older workers have above-average durations, they would have benefited particularly from the enactment of EB.

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[4] As we saw in chapter 1, though, in January 1979, only a minority of covered employment was in states in which both major sources of retirement income—OASI and pensions—were disqualifying income under UI. Thus it appears likely that the extent of the difference between the gross effect and the net impact of the federal restriction will not be very great.

[5] Clearly, if the federal restriction were imposed, we would expect many individuals to be induced to draw UI and pension benefits in different weeks within a given year.

Table 2.1 also shows that most of the recipients of UI in 1972 did not receive pension or OASI income in 1970, and thus presumably were in the labor force in 1970. Of the household heads who received UI benefits in 1972, only 11.9 percent received pension income in 1970, compared to 29.4 percent for the entire sample. This suggests that UI benefits go disproportionately to those older workers who have a continuing labor force attachment. They do not go to workers who move off retirement income, into work, and then into compensated unemployment: only 1.6 percent of all household heads who received retirement income in 1970 received UI in 1972. Rather, as the sample cohort ages, more and more members of the sampled households appear to be drawing retirement benefits and UI at the same time. By 1972, when the household heads in the sample were between 61 and 66, 48.5 percent of the households in which UI was received contained an individual who received both types of income. Moreover, 44 percent of household heads who received UI also received pension or OASI income in 1972. These estimates are quite similar to those produced by the Temporary Extended Unemployment Compensation studies in 1961 (cited in chapter 1). The data suggest that UI is a cushion for the older worker in the process of retirement. It is not a payment that represents part of a process of movement from the receipt of retirement income to reliance on earnings and work-related transfer income. (In chapter 4, this process is examined in detail.)

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[6] Calculated from U.S. Department of Labor, *Handbook of UI Financial Statistics, 1938-1976*. It is also likely that the increase was less for older people, as we know from, *inter alia*, Mincer (1974), that earnings, which determine the entitlement, fall between ages 59-64 and 61-66.

[7] Calculated from *Ibid.* and from *Economic Report of the President*, 1979.

Table 2.1
Selected Characteristics of Households of Older Persons, 1970 and 1972

Characteristic	1970	1972
All households:		
Number	6300	6556
Percent with UI benefits	4.1	4.0
UI benefits as a percent of total income	.36	.56
Percent with pension or OASI income received by:		
Household head	29.4	52.5
Spouse	7.7	14.5
Other household members	1.3	5.0
All households with UI income:		
Number	260	260
Average UI income	$695	$1143
Percent containing persons with UI and retirement income	26.9	48.5
Percent with heads having UI in 1972 and pension income in 1970	11.9	

Table 2.2 presents the simulated effects of the retirement restriction on individuals in the households in the subsamples for

each of the two years.[8] Not surprisingly, given the increased importance of retirement income for these households observed in table 2.1, the reduction in UI by retirement income has far greater effects in 1972, when the household heads are between 61 and 66 years old, than in 1970, when they are between 59 and 64. In 1970, slightly over one-fourth of the households that received UI income would have seen their benefits reduced as a result of the restriction, and this would have meant a 27 percent decline in total benefits received by households in the sample. In 1972, the same restriction would have affected nearly half of all recipient households, and total UI benefits received would have been reduced by nearly 41 percent. (The figures for 1972 may be slightly swollen by early retirement induced by the mild 1970-71 recession.)

Table 2.2
Selected Effects of the Retirement-Income Restriction, 1970 and 1972

Effect	Percent 1970	Percent 1972
All households		
Reduction in UI benefits as a percent of total income	.10	.23
All households with UI income		
Percent with reduced UI benefits	26.9	48.5
Reduction in UI benefits as a percent of total benefits	27.0	40.6
Reduction in UI benefits as a percent of total income	2.6	6.0

The main conclusion to be drawn from these results is that the retirement-income restriction enacted in the 1976 UI amendments will drastically reduce the amount of UI income accruing to workers in their early and middle 60s, and decrease somewhat less sharply the incomes of slightly younger workers. It was estimated in chapter 1 that at least $1.5 billion of UI benefits in 1978 accrued to individuals age 55 or over. Because the published data do not tell what fraction of benefits goes to workers classified by age, the simulations of the effect of the retirement income restriction cannot produce too accurate an estimate of the income loss induced by the restriction. Nonetheless, taking the reduction in UI benefits among households headed by persons 59-64 (the 1970 subsample) to be typical, it is estimated that the restriction would have reduced UI benefits received in 1978 by the elderly—and also reduced UI taxes—by $400 million.[9]

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[8] To be consistent with the language of P.L. 94-566, we include in retirement income all Social Security payments other than Disability Insurance and Survivors' benefits (and obviously Medicare) as well as receipts from private pension plans. Income from purchased annuities is not included in the measure of retirement income, as it does not appear to come under the rubric, "based on the previous work."

Effects on the Distribution of Income

Table 2.3 presents the distributions of UI benefits and all other income by decile of all other income for the 1970, 1972, and combined subsamples.[10] The income is slightly more equally distributed in the combined subsample than in either of the two individual subsamples. For example, in the combined subsample the share of income accruing to households in the highest decile is 30.33 percent, as opposed to 31.47 percent in the 1970 subsample, and 30.92 percent in the 1972 subsample. Similarly, households in the lowest decile of other income received 1.36 percent of all other income in the combined subsample, but only 1.13 percent and 1.34 percent in the 1970 and 1972 samples respectively. The greater equality of income distribution in the combined subsample, for which the data are in essence an average of two years of income, results from the averaging out of extreme random variations.

Consider now the distributions of UI benefits across households ranked by income deciles. In each year, and in the two subsamples combined, households in the lowest decile receive disproportionately small shares of total UI payments compared to their shares of all other income.[11] (This is not surprising, for the household heads in the lowest income decile are unlikely to have worked recently, and thus are unlikely to be eligible for UI benefits.) By the eighth (third lowest) decile, this is reversed: shares in total UI exceed shares in all other income. This continues until the third income decile (the second in the combined sample), at which point shares in total UI benefits begin to fall below shares in all other income. In summary, households in the lowest income decile receive a less than proportionate share of UI benefits, as do households in the highest deciles, while those households between the third through ninth deciles receive more than proportionate shares of UI.

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[9] This figure is calculated as $1.5 billion times .27, the reduction in UI benefits in the 1970 sample.

[10] For purposes of analyzing the distributional impact of UI benefits in this sample of older workers, we use an expanded definition of income that adds 6 percent of the net value of owner-occupied housing to other income flows. This adjustment makes our income measure more comparable to those used in the Feldstein (1974) and Ehrenberg, Hutchens, and Smith (1978) studies.

The effect of UI benefits on the distribution of income can be seen more clearly by considering figures 1 through 3. The solid curved line in each graphs the relation between the cumulative percent of UI benefits and the cumulative percent of all other income. If households in each income decile received the same share of UI benefits as they did of all other income, the line would be diagonal; if households in the lowest decile received all the UI income, the line would follow the left and top edges of the box; if households in the highest decile received all UI benefits, it would follow the bottom and right edges of the box. In short, UI benefits equalize the distribution of income if the solid line lies above the diagonal.

The figures show that in fact the solid lines do lie above the diagonal in all three samples. UI benefits are equalizing, in the sense that on net they are received by individuals who receive a less-than-proportionate share of all other income. Even when variations in income resulting from life-cycle behavior and secular improvements in the quality of education and training are accounted for by using a sample that is nearly homogeneous in age, UI benefits are still found to equalize the income distribution by providing aid disproportionately to lower-middle and middle-income individuals.[12]

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[11] This result is similar to that of Ehrenberg, Hutchens, and Smith (1978) for a random sample of families, and it is also similar to the phenomenon underlying the data presented by Feldstein (1974), though it does not support the interpretation he drew from those data.

Table 2.3
Percentage Distributions of UI Benefits and All Other Income in Older Workers' Households, 1970, 1972, and Combined Subsamples

	Percentage distributions					
	1970		1972		Combined subsample	
Sample decile[a]	Other income	UI	Other income	UI	Other income	UI
Lowest	1.13	.45	1.34	.58	1.36	.09
Ninth	2.49	2.02	2.66	2.90	2.66	2.96
Eighth	3.98	10.46	3.95	4.09	4.10	7.77
Seventh	5.53	10.70	5.42	11.00	5.64	7.83
Sixth	7.10	13.04	6.96	9.83	7.16	13.23
Fifth	8.67	16.46	8.54	8.88	8.77	14.71
Fourth	10.54	17.42	10.43	16.41	10.54	15.10
Third	12.73	11.47	12.90	12.60	12.93	13.22
Second	16.36	11.48	16.88	12.30	16.51	15.85
Highest	31.47	6.50	30.92	21.41	30.33	9.24
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00
N	6300		6556		4862	

a. Based on non-UI income.

Summary statistics calculated for the three samples (shown in Appendix A) suggest less equalization of income than that reported by Ehrenberg, Hutchens, and Smith (1978). This may be the result of differences in the definitions of income, but it may also be produced by the homogeneity in age in the survey. Because the sample does not include the high wage earners ages 40 to 54

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[12] This conclusion is corroborated by similar calculations on the sample's 1968 income. (Although the poor data on retirement incomes prevent our simulating the effect of the federal restrictions, the UI benefits appear to be usable.) The degree of inequality in a graph for 1968 analogous to figures 1-3 is greater than that for 1970 or 1972. That the income-equalizing effect of UI benefits is strongest in 1968 is not surprising: only 3.4 percent of households reported receiving UI income in that high-employment year when the few unemployed are disproportionately low-skilled, low-wage workers.

Figure 1
Cumulative Percentage Distributions of UI Benefits, With and Without Retirement-Income Restriction, and All Other Income, 1970

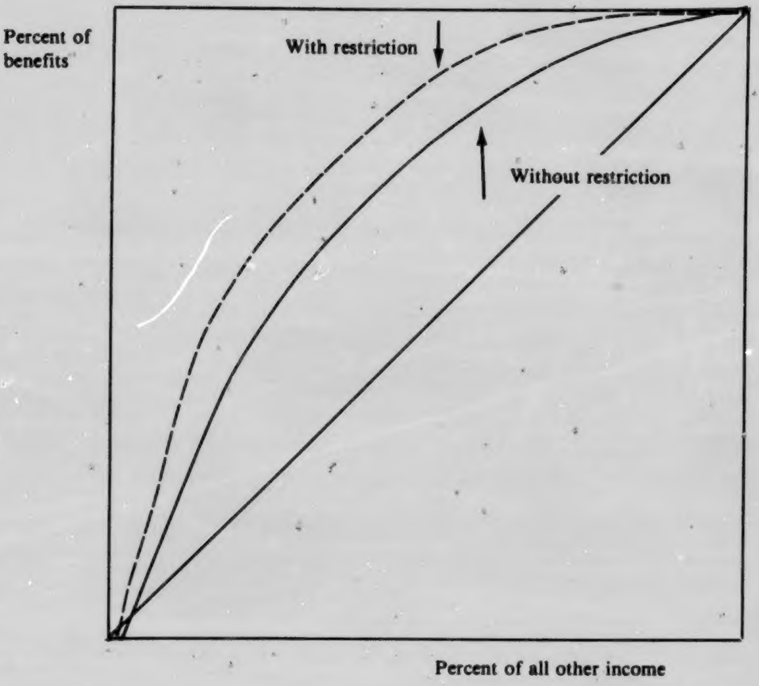


Figure 2
Cumulative Percentage Distributions of UI Benefits, With and Without Retirement-Income Restriction, and All Other Income, 1972

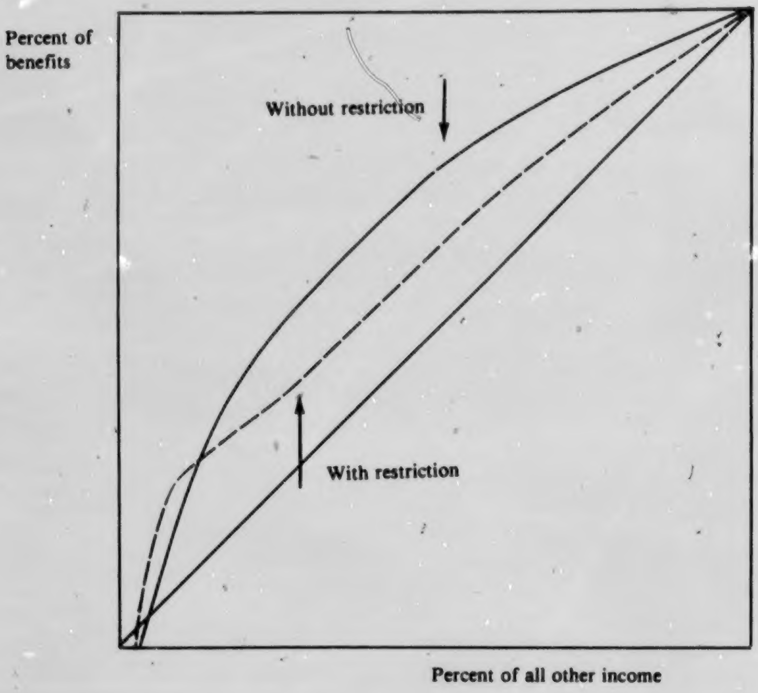
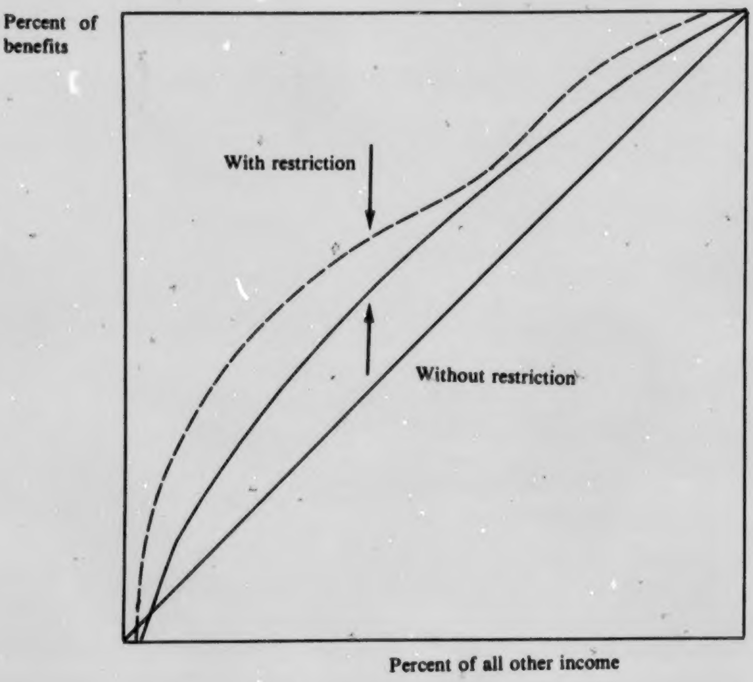


Figure 3
Cumulative Percentage Distributions of UI Benefits, With and Without Retirement-Income Restriction, and All Other Income, Combined Subsample



who are at the peak of their earnings profiles and who are unlikely to be unemployed, the comparisons of the distributions of benefits and income automatically remove some of the equalizing effect. Nonetheless, even with the removal of this additional life-cycle phenomenon, it is still found that UI benefits equalize the income distribution.

Perhaps the biggest anomaly in the results is the sharply reduced equalizing effect of benefits in 1972, when the household heads were between ages 61 and 66, as compared to 1970, when they were ages 59-64. (Notice that the solid line in figure 2 lies much closer to the diagonal than it does in figure 1.) The likeliest explanation for this is suggested by the data in table 2.1 showing that the percentage of respondents with pension income jumped from 29 to 52 percent in this two year period, a clear reflection of the increased fraction of the sample reaching age 65. As the bottom line of table 2.4 shows, the number of households drawing most of their income from pensions and OASI—those in which the head is no longer attached to the labor force—also increased.[13] With it, the number of households in which members are unlikely to have received UI benefits must have increased as well, given UI eligibility requirements. If these households had not saved enough to produce retirement incomes sufficient to maintain their prior living standard, their incomes upon retirement would have placed them relatively low in the income distribution in their age cohort. This is precisely what can be observed in table 2.4—the percentage of households whose income consists chiefly of retirement income decreases almost steadily as one moves up the income distribution. Thus the fraction of UI benefits accruing to lower-income members of the cohort that are fully retired decreases, for an increased proportion of lower-income households could not have been receiving UI benefits.

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[13] A similar pattern is shown if table 2.4 is recalculated for all households whose retirement income exceeds 50 percent of the total. In 1970 this was true for 14.5 percent of the households; in 1972, for 32.2 percent.

Table 2.4
Percentage of Households with Retirement Income at Least 75 Percent of Total Income, by Sample Decile of Total Income, 1970 and 1972

Decile of total income	1970	1972
Lowest	25.6	40.4
Ninth	22.3	35.1
Eighth	13.3	27.8
Seventh	9.0	28.5
Sixth	7.5	24.8
Fifth	5.4	19.3
Fourth	3.8	14.9
Third	2.2	9.8
Second	1.3	5.8
Highest	1.1	3.5
All households	9.2	21.0

Having shown that UI benefits equalize incomes, even abstracting from life-cycle considerations, the remaining task is to examine the effect of the proposed restriction on UI benefits for those who also receive retirement income. Table 2.5 presents the distributions of UI benefits by decile of other income, both before and after adjustment for the retirement-income restriction. The dotted lines in figures 1-3 relate the cumulative shares of UI benefits, after adjustment for the restriction, to the cumulative shares of all other income. For the 1970 and combined subsamples, summary statistics (see Appendix A) suggest that the restriction equalizes the distribution of incomes within this age cohort still further. For 1972 the opposite is true: the statistics indicate that, while UI benefits are still equalizing in this subsample of 61 to 66 year olds, their effect is less equalizing than in the absence of the retirement-income restriction.

This difference in the results between the two years can be examined in more detail by comparing the graphs of the pairs of distributions in figures 1-3. The dotted line in figures 1 and 3 lies uniformly above the solid line that shows the actual relationship (without the restriction). In these two sets of results, the restriction is uniformly equalizing: each lower group in the income

Table 2.5

Percentage Distributions of UI Benefits, Before and After the Retirement-Income Restriction, by Sample Decile of Other Income, 1970, 1972, and Combined Subsamples

Decile of other income	1970 Before restriction	1970 After restriction	1972 Before restriction	1972 After restriction	Combined Before restriction	Combined After restriction
Lowest	.45	.61	.58	.59	.09	.15
Ninth	2.02	2.07	2.90	3.41	2.96	3.87
Eighth	10.46	11.95	4.09	3.75	7.77	9.22
Seventh	10.70	10.46	11.00	12.98	7.83	8.36
Sixth	13.04	13.11	9.83	9.22	13.23	16.03
Fifth	16.46	18.78	8.88	6.85	14.71	14.76
Fourth	17.42	16.95	16.41	13.40	15.10	16.12
Third	11.47	11.66	12.60	13.80	13.22	10.77
Second	11.48	9.00	12.30	6.54	15.85	13.95
Highest	6.50	5.41	21.41	29.46	9.24	6.77
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00

(Percentage distribution of UI benefits) distribution receives a greater share of UI benefits when the restriction is applied than when it is not.

The same is obviously not true for 1972, as figure 2 shows. Nevertheless, from the lowest up to and including the sixth decile of the income distribution, the curve in figure 2 showing the distribution of UI benefits with the restriction lies above the curve without the restriction. While on net the restriction reduces the equalizing effect of UI, it does increase the share of UI benefits accruing to households in the bottom half of the distribution of incomes among households headed by persons ages 61-66. This equalizing effect is more than offset by the reductions in the shares accruing to households in the higher (second through fifth) deciles, and the large increase in the share of UI benefits going to the highest decile when the pension restriction is applied.

Why does the sharp difference in the results between 1970 and 1972 arise? One cannot be entirely sure, but it is likely that the same phenomenon is at work here that produced the much smaller equalizing effect of UI benefits in 1972 as compared to 1970 that was shown in table 2.3. The highest two deciles in the income distribution in 1972 contain relatively few families in which an individual is still partly attached to the labor force yet also receiving some retirement income. In the next three lower deciles, more individuals are apparently both receiving retirement income and are partly attached to the labor force and thus eligible for UI benefits when unemployed. That this difference occurs reflects the apparent shortsightedness of savers, shown by the lower position in the income distribution in table 2.4 of those whose incomes are composed to a large degree of pension and other income resulting from savings. Thus when the restriction is imposed, it is households that have moderate incomes but receive substantial amounts of both UI and retirement incomes that are hit most severely, while the highest decile of households, containing as it does relatively few recipients of retirement income, is only slightly affected.[14] The lower half of the income distribution is also not so greatly affected because, as table 2.4 shows, so many individuals in it are completely retired that they are not likely to remain eligible for UI. These same facts did not affect the results so strongly in the 1970 sample, for the incidence of receipt of retirement income was much lower when the sample was two years younger.

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[14] Households in the highest income decile would suffer a reduction in UI benefits as a result of the pension restriction, but they would still receive 81 percent of the UI benefits they get without the restriction. This compares to a sample average of only 59 percent in 1972.

Summary and Implications

In this chapter, a number of aspects of the effect of UI payments on the distribution of incomes among households headed by older individuals have been examined. Using data from the Retirement History Survey, it has been found that : (1) UI benefits make the distribution of income more equal than it would have been had no benefits been paid; (2) the restriction on retirement income would reduce UI benefits received by households headed by persons 59-64 years old by 27 percent, and by 41 percent among households headed by persons 61-66 years of age; and (3) the retirement-income restriction would make the distribution of incomes more equal across households headed by persons age 59-64. In a sample composed of two years' income of persons ages 59-64 in one year and 61-66 two years later, the same result is observed. Only in a sample restricted to one year's income of households headed by persons 61-66 years old would the retirement-income restriction make the income distribution less equal.

These results shed new light on the effects of UI payments on the income distribution. When one accounts for differences in life-cycle behavior by confining the analysis to a relatively narrow age group, one finds that the payment of UI benefits makes the distribution of income more equal within that age group. It does this by decreasing the income shares of the highest three deciles and increasing those of households in the third through ninth deciles. Results obtained in previous studies that failed to account for life-cycle effects, a problem that seriously affects comparisons of income distributions, remain valid when this failure is remedied.[15]

In the group of 61 to 66 year olds, the disequalizing effect of the retirement-income restriction occurs because the highest-income group is aided at the expense of the upper middle-income groups. Even in this sample, though, households in the lower half of the income distribution improve their relative position as a result of the restriction. This observation, coupled with the results for the combined subsamples in which extremes in income are averaged out, suggests that the pension restriction might be *on net an equalizing force* on the distribution of income *within the cohort of older households*. At the very least, these results are quite inconsistent with the notion that the restriction would decrease income equality. They seem to contradict the finding of Ehrenberg, Hutchens, and Smith (1978), based on a sample of households of all ages.

Unemployment insurance is an income maintenance program. Any change in its structure should be examined for its impact on the income distribution, since the major goal of such programs is to preserve living standards. To view it in this light produces a quandary. On the one hand, the retirement-income restriction would increase, or at least not reduce, income equality among the older population. On the other hand, older workers are generally less well-off than the average worker. The restriction would, by reducing incomes solely among households headed by older workers, decrease income equality in the population as a whole.[16] Repealing the restriction would maintain the UI system as a vehicle for redistributing income toward the elderly, albeit the higher-income elderly.

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[15] For example, Paglin (1975) shows that in 1972 one-third of the inequality implicit in data on the income distribution resulted from differences in ages of the households. Because of changes in the age structure of the U.S. population, this effect had grown from roughly 20 percent in 1947.

[16] The reduction in UI benefits would reduce UI taxes. In the absence of any information about tax incidence for such taxes, we make the standard assumption that the rise in after-tax incomes is proportionate across the population, and thus does not affect our measures of the percentage distribution of other income.

Taking the long view and considering the distribution of incomes over the lifetime of a population cohort, one should, though, ignore this consideration of intergenerational equity: repeal of the restriction would aid groups late in their lives who are better off throughout their lives. That they happen to be poorer, on average, late in life than their children should be an irrelevant consideration for a program that does not specifically have as its goal the maintenance of incomes among the older population. Considering *only* the issue of the effects on the distribution of income, the retirement-income restriction is beneficial in that it will probably make the distribution of lifetime incomes more equal. If one wishes to raise incomes among older persons, there are other programs targeted to them that are better suited for that purpose.

Chapter 3
Unemployment Insurance and Consumption Among Older Workers

Introduction

Disqualifying pensioners from receiving UI benefits, or reducing their benefits, could have a detrimental impact on their well-being if their consumption is seriously affected by the disqualification. It is, after all, the living standard—consumption—of the population that has been a major focus of social insurance since its inception. For example, in the debate before the establishment of the UI system in the thirties, one leading observer noted, "Provision for those whose income has ceased because of unemployment will constitute a major problem of practical economics for years to come."[1] In his message to Congress transmitting Social Security legislation, President Roosevelt stated, "Among our objectives I place the security of men, women and children of this Nation first. . . . They want some safeguard against misfortunes which cannot be wholly eliminated in this man-made world of ours."[2] Indeed, the preamble to the bill that eventually became the Social Security Act stated that it was designed "to alleviate the hazards of old age, unemployment."[3] Haber and Murray (1966, chapter 2) state that the prime objective of UI is the prevention of hardship caused by job and wage loss.

This chapter considers how the older household will respond to unemployment by changing its consumption. Within the context of the standard economic view of consumption, it presents an analysis of how UI benefits will be spent and whether benefits received by a household in which someone is unemployed will be spent differently from the household's usual source of income. Such analysis will make it possible to deduce the fraction of older households for which benefits are adequate in the following sense: does the household receive sufficient benefits or have access to prior savings or to borrowed funds that enable it to maintain consumption at the level it would have had a household member not been unemployed? Since the likelihood that a household has past savings or can borrow may depend upon its income, there is also an examination of whether benefit adequacy varies with the household's income level attained before the spell of unemployment started.

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[1] Eveline M. Burns, "The Economics of Unemployment Relief," *American Economic Review*, 23, March 1933.

[2] Message of June 8, 1934.

[3] 74th Congress, 1st Session, H.R. 4142, submitted by Representative David Lewis on January 17, 1935.

The estimates of benefit adequacy and its correlates are all made from subsamples of the Retirement History Survey (RHS), using consumption data from 1970 and 1972. In addition, the RHS provides data on expenditures for several different spending categories by households in which the heads are roughly the same age, making it possible to examine the types of items that UI recipients consume disproportionately and those on which additional UI benefits are spent. The results of these examinations can be used to determine whether the living standards of older recipients will be severely hurt by the restriction on UI benefits received by pensioners, since it can be inferred whether a significant proportion of older households already find benefits inadequate.

How Will UI Benefits Affect Consumption?

The economic theory of consumption is based on the view that people have a good idea of their lifetime incomes and the length of time they intend to be working during their lives.[4] In its simplest form the theory states that individuals will save enough during their work lives to ensure that their consumption does not drop during their retirement. If members of the Jones household expect to work 40 years and live 10 years in retirement, and income is $10,000 per year while working, the household will, according to the theory, consume $8,000 per year in each year of its life. This means that the Joneses will save $2,000 per year during the work lives of their members, so that they have enough savings to keep consumption at $8,000 per year during retirement. (This example ignores any interest that may be earned on savings, or any preference the household may have for consumption today over consumption in the future. These are complications that do not qualitatively affect the conclusions drawn.)

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[4] The theory of consumption generally accepted by economists is that of Friedman (1957). Its major implications are that increases in income that are expected to persist will have a nearly one-for-one effect on current consumption, while those that are considered temporary will have only a minute effect on consumption today. The notion that some individuals must adjust consumption because of an inability to borrow has been discussed

Consider what happens if in one year the household's income drops to $5,000, and in the next year it rises (for that year only) to $15,000. The household's lifetime income has not changed; if it can borrow or dip into savings in the first year, it will maintain consumption at $8,000. Similarly, in the second of these two years it will save $7,000 or repay loans. The main point is that, given the rationality of smoothing consumption over the household's lifetime, *transitory* variations in income will not greatly affect consumption.[5] Instead, consumption will be affected by the household's *permanent*, or average income per year of its life.

Clearly, this theory is highly refined; as with most theories, one can criticize it as being too abstract, unable to account for quirks of individual behavior, or overly simplified. These criticisms are correct. Yet, the theory has been powerful enough to explain such diverse phenomena as: (1) The post-1945 economic boom, an expansion that occurred when most people expected a return to the Depression as wartime military spending ended; (The boom

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by Tobin and Dolde (1971). Its implications for spending out of UI benefits are derived in Hamermesh (1979), and, for the behavior of the unemployed generally, by Flemming (1978).

[5] That smoothing consumption is rational is demonstrated in extreme form by the following consideration: most persons would rather consume $20,000 worth of goods with certainty than have a 20 percent chance of consuming $100,000 and an 80 percent chance of consuming nothing.

occurred because people's lifetime income had increased during the World War II boom, yet consumption had not because of wartime rationing.) and (2) The reduction in private saving induced by the advent of Social Security, with its provision of public saving for retirement.[6] Other examples can also be offered. Rather than discussing them, consider what the theory implies about the relation between consumption and UI benefits.

How would the Jones family respond to the receipt of $1,000 in UI benefits during the year in which its other income is only $5,000? As noted earlier, because it could borrow or dip into prior savings, its consumption would have been $8,000 that year even if no benefits had been received. The $1,000 does raise the household's lifetime income; but, assuming the household attempts to smooth income over its life, the effect on consumption during the period when the benefits are received is tiny. For the Joneses, who are able to borrow or dip into past savings, the UI benefits represent a transitory increase in income that, like other such increases, raises consumption slightly each year of the household's remaining life.

Now consider the Cohens, a household identical to the Joneses, except that they cannot borrow and have no savings to draw upon during the year when their income is only $5,000. Even though their lifetime income is the same as the Joneses', their consumption is drastically reduced, from $8,000 to $5,000 during that year. How will they spend the $1,000 of UI benefits? In their case it would make sense to spend every penny of it. Even if they do this, their consumption will only be $6,000, far less than the $8,000 of goods consumed in earlier years of their lives or than the $8,000 consumed later. Spending the entire $1,000 helps to smooth consumption across the household's life. If they saved part of it they would increase consumption during later periods, when it is already high, at the expense of current consumption, when it is abnormally low.

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[6] For example, see the theoretical arguments, empirical evidence, and references in Munnell (1976).

For the Joneses, it may be concluded that UI benefits are more than adequate as judged by the *objective standard* of how they are spent. Because the Joneses can borrow or dip into savings, the UI benefits are hardly spent at all. The story is different for the Cohens: they spend all the UI benefits they receive. Furthermore, even if they get $3,000 in benefits, they would spend it all, for they would still then be consuming only $8,000 per year. For the Cohens, the $1,000 in UI benefits are inadequate, in the sense that the amount is insufficient to enable them to maintain their standard of living (at $8,000 per year). The benefits are inadequate both because they are meager compared to the size of the lost income, but also because the household, for whatever reasons, does not have access to borrowed funds or past savings.

The view of benefit adequacy implicit in this discussion is fundamentally different from that contained in the many studies of the subject.[7] In these works, the authors identify certain expenditure categories as being "necessary and obligated" or "nondeferrable" and define benefit adequacy in terms of the fraction of such expenditures that other income and UI benefits can cover. One difficulty with that method is that it is necessarily arbitrary in its selection of commodities. Also, it ignores the possibility that households that dip into savings to meet periods of unemployment are not facing hardship, but are instead using savings that were set aside in the expectation of future unemployment. For such households, there is no hardship from unemployment, for they are able to maintain their standard of living. Benefits would be considered inadequate for such households in the existing benefit adequacy literature; by the criterion of this study, though, they are more than adequate, since the household has its own means of maintaining its consumption.

One obviously cannot take households out of a sample of data and point out some as being more like the Joneses and others as more like the Cohens. However, the discussion suggests that households for which benefits are adequate or more than adequate will spend each extra dollar of UI benefits to the same extent they would spend an extra dollar of transitory income. Spending propensities out of UI benefits will be low for them. Households for which benefits are inadequate will spend 100 percent of each extra dollar of benefits. In the entire sample, the propensity to spend out of UI benefits will be a weighted average of the consumption behavior of households like the Joneses and the Cohens. If UI benefits are spent dollar-for-dollar by the average household, it may be inferred that most households are like the Cohens and find benefits inadequate; if UI benefits are largely spent in the same partial way as is transitory income, it may be inferred that most households, like the Joneses, find benefits at least adequate.

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[7] Becker (1961) analyzed the behavior of households surveyed by the Department of Labor in the studies of the 1950s. Blaustein and Mackin (1977) extended the work using data for South Carolina. Burgess and Kingston (1978) conducted a major benefit adequacy study in Arizona using econometric techniques not used in the earlier studies.

In addition to allowing an estimate of the fraction of households for which benefits are inadequate, this approach also allows an examination of whether the likelihood that benefits are inadequate varies with identifiable characteristics. In particular, the theory stated that households that can borrow easily or that have prior savings are less likely to find benefits inadequate. Since a cushion of savings and access to loanable funds are likely to be greater among higher-income households, the study examines whether spending propensities out of UI are more like those of the Joneses among higher-income households that receive UI benefits.

Using this approach, it is possible to form some hypotheses about how UI benefits will affect the consumption of different goods and services. The recipient household that must reduce its consumption is faced with the choice of which items to cut back on. If its members are logical, they will reduce spending on those goods that were added to their consumption as their living standards rose. One should expect UI recipients who face reduced living standards (for whom benefits were inadequate) mainly to reduce their consumption of luxuries. Comparing UI recipient households to others, a larger share of total consumption among UI recipient households would be expected to go for necessities, and a smaller share for luxuries. While the identification of luxuries and necessities could be arbitrary, this arbitrariness is avoided by identifying as luxuries those goods whose consumption increases more than proportionally as average household income rises, and necessities as those whose consumption rises less than proportionally.[8]

Just as UI recipients are likely to reduce spending most on luxuries, they will respond to additional UI benefits by attempting to restore their spending on those items—luxuries—that they cut out during the period of reduced consumption. It is expected that propensities to spend out of UI benefits will be greatest on luxury items, smallest on necessities. Paradoxically, UI benefits will be spent mostly on luxuries, even where recipient households suffer reduced living standards during times of unemployment.

These considerations suggest several conclusions about the likely effects of the federal restriction on the receipt of UI by pensioners. First, if it is found that UI benefits are inadequate for a substantial fraction of recipient households, it may be concluded that the fraction would have been higher had the restriction been in effect. Second, if the likelihood that benefits are inadequate is greatest for low-income households, this would reduce arguments against the retirement-income restriction. Chapter 2 showed that the restriction would reduce benefits least among low-income households. Finally, if the data confirm the hypotheses about the pattern of spending out of additional UI benefits, the restriction can be expected to induce even sharper cutbacks in purchases of luxury goods by recipient households, as their total income would be reduced still further when they are unemployed.

Data and Simple Comparisons of UI Recipient Households and Others

The analysis is based on data from subsamples of households from the Retirement History Survey responses for 1971 and 1973 (income and spending for 1970 and 1972). For the data covering

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[8] In what follows, we measure the income elasticity of demand for each commodity, the percentage response of spending to a 1 percent increase in income, other things equal. The designation of luxuries as those with income elasticities above one, and necessities as those elasticities below one, is standard parlance.

1970 income and consumption, only 3,188 households met the criterion of having complete and usable information required for the analysis; for 1972, 2,458 households met this criterion. Despite the very large fraction of households for which data were not usable in this analysis (remember, 8,928 households were included in the 1972 RHS), the remaining subsample appears to be fairly representative of the original sample. In the 1970 subsample, for example, 90.0 percent of the households are white, 61.9 are headed by a married male, and 28.8 are headed by a married female. For the original RHS panel of 11,153 households, the comparable percentages are 90.0, 60.5 and 28.7, a remarkably close correspondence. In the subsample for 1972, the figures are 91.7 percent, 63.6 percent and 26.6 percent, indicating a somewhat greater proportional representation among whites and households headed by married males. That this occurs is expected: incomplete responses are least likely among those groups with higher incomes and higher socioeconomic status, so that whites and two-person households are more likely to be represented increasingly in the sample as it ages.

Table 3.1 presents the means and their standard deviations for a number of household characteristics separately for UI recipient households and others in the two subsamples. Several of the measures require some explanation. Non-UI income after taxes consists of income from all sources other than UI benefits, adjusted for Social Security and federal personal income taxes.[9] To this sum is added an imputed income from the net value (market value minus mortgage) on owner-occupied housing.[10] The "partly retired" and "fully retired" categories are based on the household head's response to a question that asks him to appraise his retirement status. It is thus subjective, but probably reflective

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[9] The income figures used are an approximation to disposable income, derived by applying the relevant year's data on actual effective rates of the federal personal income tax, and data on Old Age, Survivors, Disability and Health Insurance payroll tax rates and ceilings, to all income flows other than UI and retirement income. (See U.S. Department of the Treasury, *Statistics of Income*, 1968, 1970, 1972.)

[10] The imputation assumes a 6 percent return on the homeowner's equity. While low by today's standards, this was reasonable in the early 1970s.

Table 3.1
Selected Characteristics of Older Worker Households, 1970 and 1972

	Subsample average[a]			
	1970		1972	
Characteristic or spending category	**UI recipients**	**Others**	**UI recipients**	**Others**
Number of households	**175**	**3,013**	**113**	**2,345**
UI benefits	$ 684 (43)	--	$ 954 (71)	--
Non-UI income after taxes	$7,560 (325)	$7,566 (102)	$8,377 (532)	$8,787 (138)
Age of head	61.25 (.13)	61.41 (.03)	62.89 (.16)	63.30 (.04)
Percent white	93.1 (1.8)	89.8 (.6)	88.5 (3.0)	91.9 (.6)
Percent with married male head	73.7 (3.3)	61.2 (.9)	77.0 (3.9)	63.0 (1.0)
Percent with female head	15.4 (2.7)	29.6 (.8)	15.9 (3.5)	27.1 (.9)
Percent with head responding as fully retired	19.4 (2.9)	31.9 (.8)	33.6 (4.6)	47.0 (1.0)
Percent with head responding as partly retired	18.9 (2.9)	9.6 (.5)	23.9 (4.0)	14.5 (.7)
Percent of after-tax income spent on:				
Food[b]	—	—	15.51	15.58
Transportation[c]	5.12	5.03	6.48	5.90
Vacations and trips	2.74	3.06	2.58	3.40
Housing	21.77	22.43	23.54	23.25

a. Standard deviations are shown in parentheses.

b. Food is excluded for 1970 because the raw data were unavailable.

c. Includes gasoline in 1972.

of how close an attachment to the labor force he has, at least as compared to the alternative response, "not retired."

Before comparing the sample means of the characteristics for the two groups of households in each subsample, it is worth noting that the amount of UI benefits per recipient household in the 1970 subsample is almost identical to the $695 for the (larger) 1970 subsample used in chapter 2. The same measure for the 1972 subsample is smaller here than the $1,143 reported in table 2.1; however, the difference is not quite significant given the size of the standard deviation of the mean benefits.[11] These considerations reinforce the conclusion about the representativeness of these subsamples.

Despite the small size of the sample of UI recipient households, significant differences are found between the means of some of their characteristics and those of households that do not contain UI recipients. For example, in both subsamples the households in which someone receives UI are significantly more likely to be headed by a married male, significantly less likely to be headed by a single female, and (inferentially) equally likely to be headed by a single male. That households headed by married men comprise a disproportionate share of UI recipient households in the sample is not surprising: such households are much more likely to contain more than one person, and thus more than one potential UI recipient. What is interesting is that households headed by single males have roughly the same shares among UI recipient households and others, while those headed by single females are underrepresented among UI recipient households. This corroborates data on the entire UI program for individual recipients showing women to be a smaller fraction of recipients than of the labor force (see Hamermesh 1977, p. 22).

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[11] The standard deviation for the test of the difference between two sample means is:

$$S = \sqrt{(N_2 S_1^2 + N_1 S_2^2) / N_1 N_2}$$

where N_1 and N_2 are the numbers of observations in each sample, and S_1 and S_2 are the standard deviations of the means in each sample.

In the 1972 subsample, the heads of UI recipient households are significantly younger than those of other households. This undoubtedly reflects the increased likelihood of withdrawal from the labor force (and thus the lesser likelihood that the household head is eligible for UI benefits) as the head ages. They are also less likely than others to report themselves as fully retired, again probably reflecting the fact that the fully retired person is not likely to have established eligibility for UI based on recent prior work. That many UI recipients do state they are fully retired may reflect such work or it may just reflect fuzziness in responses to the question in the survey. What is interesting, though, and crucial to the consideration of the restriction on the receipt of UI by pensioners, is that the heads of households that receive UI income are more likely than others to report themselves as partly retired. This relationship, which is considered in much more detail in chapter 4, suggests that a substantial amount of UI benefits accruing to older workers goes to those with a fairly weak labor force attachment.

For 1972, the original data allow the construction of observations on spending on food, transportation and gasoline, vacations and trips, and housing.[12] While data on other categories would be nice to have, they are not available in the RHS in usable form. Together these four consumption categories comprised 48 percent of average after-tax income in the sample. The same fraction of after-tax income is spent by both groups on these four categories combined. However, table 3.1 shows that UI recipients allocate a substantially greater fraction of their total income to transportation and gasoline. This difference, though probably not significant, is what one would expect if the UI recipients devote a large part of their time to job search that involves the use of autos or public transportation.[13] Conversely, they spend proportionately less on vacations and trips. Of course, these percentages may differ because average incomes differ between UI recipient households and others. The regression analysis of the next section will examine this issue.

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[12] Expenditures on food were calculated by multiplying by 52 the respondent's reported usual weekly expenditures on food, as was spending on transportation. (The use of usual expenditures circumvents any problems of seasonality.) Gasoline expenditures were estimated by multiplying by 12 the reported monthly spending. "Housing" spending is an amalgam of blown-up monthly rent or mortgage and taxes, plus annual spending on utilities and other housing services, plus 6 percent of the net value of owner-occupied housing. Finally, vacations and trips expenditure is the amount the respondent reported as spending on this category. Clearly, these categories are not consistent with one another, but they appear to be the most sensible, given the way the data are reported in the Survey. To the extent there are errors in the reporting of these data, the significance of our results will be reduced; conversely, if we find significant results, we may infer that the errors are not too serious.

The consumption data for 1970 contained so many errors in the category for food expenditure that only three commodity groups could be used—transportation, vacations and trips, and housing expenditures. (With the exception of the deletion of gasoline from the first of these three, the categories are measured exactly as in the 1972 data.) Table 3.1 shows the shares of these three categories in the after-tax incomes of UI recipients and others: spending as a fraction of total income is again about the same in both groups, and again UI recipients spend proportionately more on transportation and less on vacations and trips.

One might well object that the small number of recipient households and likely errors in reporting of consumption by category make any inferences from these data very shaky. The validity of this objection is testable: if it is found that there are systematic differences between spending propensities out of UI and other income, or that consumption as measured is related to income, it may be inferred that the data are reliable.

The major goal of this chapter is to deduce from the data the fraction of older households whose propensity to spend out of UI benefits implies that the benefits are inadequate for them. To do that, it is necessary to estimate relationships, through multiple regression equations, of each household's spending for each category to its income from UI benefits and all other sources. The coefficients from these regressions are in fact the marginal propensities to spend out of income from the particular source.

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[13] Barron and Mellow (1979) find that UI recipients spend less time engaged in job search than do other unemployed workers. However, since the overwhelming majority of people in our sample who do not receive UI benefits are also not unemployed, and presumably not searching, we may conclude that the average UI recipient spends more time searching for work that the average person in the sample.

The previous section of this essay suggested that the fraction of households for which spending is inadequate can be inferred by comparing spending propensities out of UI to those out of permanent and transitory income. These two theoretical concepts are hard to measure in practice; however, having several years of data on incomes in each household makes it possible to attempt such measurement. Essentially, it is assumed that permanent income in nonrecipient households is the average of income in the current year and that observed when the subsample was interviewed two years earlier. Thus, for example, for the 1970 subsample, it is the average of the household's incomes in 1968 and 1970. Transitory income is then estimated as the deviation of actual from permanent income. The procedure is more complex for UI recipient households, as shown in Appendix B, but it is based on the same idea.

For each nonrecipient household, there are measures of permanent and transitory income; for each recipient household, there are these plus a measure of its UI benefits. These measures can then be used in the regression analysis to estimate the spending propensities to be examined. (The exact equations used are shown in Appendix B.) Because it is likely that the choice of how much to spend on different items is affected as well by factors other than the various income flows, a number of demographic and work-status variables are also included in the estimating equations. Demographic variables include the household head's race, sex, marital status and age, and the number of children living in the household. Included as work-status measures are variables indicating whether the head is fully retired, partly retired, or not retired. Clearly, other control variables might be included, and, in fact, others were tried. As the results for them in Appendix B suggest, though, these particular variables are important in explaining variations among households in patterns of consumption.

Evidence on the Effect of UI and Other Income on Consumption

Before discussing the estimates of spending propensities out of permanent and transitory income, spending propensities among UI recipient households should be considered. Table 3.2 presents the estimated marginal propensities to spend in each category out of UI and other income. In addition, marginal spending propensities on the total of the several categories are also included. In both 1970 and 1972, propensities to spend out of UI are found to exceed those out of other income in most cases. It was noted earlier that spending out of UI by households for which benefits are inadequate will exceed marginal spending propensities out of permanent income, while, for households for which UI is adequate, spending propensities out of UI will be lower. Since the estimated propensities to spend out of UI on all categories combined are fairly large compared to those out of other income, it may be concluded that at least some fraction of the recipient households finds UI benefits inadequate. It is also worth noting that, despite the relatively small number of households receiving UI, many of the marginal spending propensities are positive and are significantly different from zero. This should enhance one's confidence in the reliability of the data, and thus in the results of estimates using these data, as it implies that the consumption data are not simply random.

Table 3.3 presents the estimates of the propensities to spend out of permanent and transitory income in each year for all households in the subsamples. Some comment is required about the estimated spending propensities themselves. As the theory predicts, spending propensities out of permanent income exceed those out of transitory income, suggesting that these are measured with some accuracy. Worth noting too are some interesting differences between the marginal propensities and the shares of income spent on each commodity that were shown in table 3.1. Even though transportation (transportation and gasoline in 1972) takes a larger share of after-tax income than do vacations and trips, marginal propensities to spend on vacations and trips are greater. This is consistent with the expectation that vacations are a luxury good that becomes more important only as income increases. An even stronger comparison between food and vacations in the 1972 subsample reinforces this point.

Table 3.2
Estimates of Marginal Spending Propensities Out of UI and Other Income, UI Recipient Households, 1970 and 1972

Spending category	Marginal propensity to spend out of:[a]			
	1970, N=175		1972, N=113	
	Other income	UI income	Other income	UI income
Food[b]	--	--	.0417* (3.45)	.1190* (1.34)
Transportation[c]	.0229* (3.47)	-.0153 (-.33)	.0285* (2.53)	-.0437 (-.53)
Vacations and trips	.0520* (7.37)	.1418* (2.83)	.0360* (5.05)	.0591 (1.13)
Housing	.1017* (5.82)	.4035* (3.25)	.1291* (6.11)	.1129 (.73)
All three categories (four in 1972)	.1766* (8.70)	.5299* (3.67)	.2352* (7.78)	.2474 (1.11)

a. t-statistics, ratios of the spending propensities to their standard errors, are in parentheses below the estimated spending propensities.

b. Food is excluded for 1970 because the raw data were unavailable.

c. Includes gasoline in 1972.

*The spending propensity is different from zero at the 90 percent level of confidence.

The major points of interest and probably the most important findings of this chapter are the estimates of the fractions of households whose spending out of UI suggests that benefits are inadequate. In the 1970 subsample, it is estimated that hardly any of the households find benefits inadequate; only 5 percent of the UI recipient households appear to spend as if UI benefits were inadequate. In the 1972 subsample, it is estimated that 60 percent of UI recipient households spend as if benefits were inadequate.

(See Appendix B for a discussion of the derivation of these estimates.) These estimates are substantially different, probably because of the relatively few households with UI income in the subsamples. They do suggest, though, that perhaps a majority of older UI recipient households finds benefits adequate in the sense that UI benefits, together possibly with prior savings and borrowed funds, are sufficient to prevent consumption from declining. They also imply that a reduction in UI benefits for pensioners will not reduce the living standards of almost a majority of older households in the sample, or, by inference, in the entire population.

Table 3.3
Estimates of Marginal Spending Propensities, Out of Permanent and Transitory Income, All Households, 1970 and 1972

	Marginal propensity to spend out of:[a]			
	1970, N = 3188		1972, N = 2458	
Spending category	Permanent income	Transitory income	Permanent income	Transitory income
Food[b]	--	--	.0581* (23.96)	-.0008 (-.11)
Transportation[c]	.0358* (13.93)	.0215* (2.51)	.0403* (14.52)	.0422* (5.02)
Vacations and trips	.0527* (30.60)	-.0079* (-1.38)	.0622* (22.20)	.0124* (1.46)
Housing	.1900* (42.56)	.0222* (1.49)	.1640* (31.21)	.1333* (8.39)
All three categories (four in 1972)	.2784* (51.02)	.0367* (2.03)	.3246* (46.55)	.1874* (8.90)

a. t-statistics, ratios of the spending propensities to their standard errors, are in parentheses below the estimated spending propensities.

b. Food is excluded for 1970 because the raw data were unavailable.

c. Includes gasoline in 1972.

*The spending propensity is different from zero at the 90 percent level of confidence.

While it is interesting to know the percentage of households that appear to have inadequate UI benefits, it is more useful for the analysis of the retirement-income restriction to know how this percentage differs among households with different incomes. It was noted earlier that the ability to borrow and the likelihood of having past savings would tend to ensure that higher-income households are more able to maintain consumption during periods of unemployment. On the other hand, low-income UI recipient households, where weekly earnings are likely to be low, may have a greater fraction of their lost earnings replaced by UI than higher-income households because of state benefit maxima. The net effect is an empirical question, the answer to which is provided by methods described in Appendix B. The results of applying these methods are presented in table 3.4 for a range of permanent incomes that includes over 90 percent of the households in each subsample. They show unequivocally that, in both subsamples, the probability that a UI recipient household spends its income as if benefits are inadequate—in the sense that they are unable to maintain consumption—is greatest among low-income households. (The differences between the two years, and between these estimates and the average figures quoted above, which are based on equation B.3 in Appendix B, are again the result of sample variation—the number of recipient households is relatively small.) This suggests that it is the lack of access to borrowed funds or past savings that is the major determinant of whether a household can maintain consumption during periods of unemployment, given that UI benefits replace only part of lost earnings.

One might argue that this finding is not surprising, to say the least: low-income households consume less, so it is natural that they are more likely to find benefits inadequate. Such an argument completely misses the point. Benefit adequacy has been defined in terms of the relation between living standards during unemployment compared to those when household members are at work. This says nothing *per se* about absolute levels of consumption, but instead deals with potential shortfalls of consumption among the unemployed. What the findings in table 3.4 show is that these shortfalls from usual consumption are most likely among households whose incomes are lowest even when the members are employed.

Table 3.4
Estimated Percent of UI Recipient Households With Inadequate UI Benefits, at Selected Levels of Permanent Income, 1970 and 1972

	Percent with inadequate benefits[a]	
Permanent income	1970	1972
$ 2,500	57.0	99.99
5,000	16.2	99.97
7,543[b]	2.3	---
8,756[c]	---	99.85
15,000	.1	97.6
25,000	.01	69.2
Total subsample[d]	5.0	60.0

a. Inadequate as defined in the text.

b. 1970 mean permanent income.

c. 1972 mean permanent income.

d. Based on equation B-3 in Appendix B.

Earlier in the discussion, it was deduced that households in which persons receive UI benefits will spend those benefits disproportionately on luxury items. To examine whether this in fact occurs, it is first necessary to know which items are luxuries and which are necessities. Table 3.5 shows for each year the percentage increase in spending by category in response to a 1 percent increase in permanent income. (These responses are based on the estimated marginal spending propensities out of permanent income by all households shown in table 3.3.)[14] "Vacations and trips" is the only luxury category, where "luxury" is defined as a category for which the percentage increase exceeds one. Food appears to be the most basic necessity (lowest percentage) among the four categories examined, with housing and transportation intermediate between food and vacations. Neither our classification nor the relative ranking of spending categories as luxuries or necessities seems to conflict with commonly-held notions.

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[14] These responses (income elasticities) are calculated at the means of each spending measure and the measure of permanent income.

Table 3.5
Percentage Change in Spending by Category With One Percent Increase in Permanent Income, and Relative Responsiveness to Additional UI Benefits, 1970 and 1972

	1970		1972	
Spending category	(1) Percentage increase in spending (All households)	(2) Relative responsiveness to added UI income (UI recipient households)	(3) Percentage increase in spending (All households)	(4) Relative responsiveness to added UI income (UI recipient households)
Food[a]	--	--	.37	98
Transportation[b]	.70	102	.68	94
Vacations and trips	1.70	127	1.84	126
Housing	.83	96	.70	99
All categories combined	.91	100	1.00	100

a. Food is excluded for 1970 because the raw data were unavailable.

b. Includes gasoline in 1972.

Columns (2) and (4) of table 3.5 list values of an index showing the relative responsiveness of spending in each category to the receipt of additional UI benefits. (The method of computing this index is discussed in Appendix B.) A comparison of columns (1) and (2), and (3) and (4), provides a striking confirmation of the hypothesis on how UI affects consumption among older workers. In 1972 the index is greatest for vacations and trips, the category that has the highest response of spending to additional permanent income. This indicates that UI benefits are spent disproportionately more on this luxury category. The index is below 100 for all three other categories; this demonstrates that relatively little of the extra UI benefits is allocated to these necessity categories. In the 1970 subsample, though there are only three categories to compare, the same behavior seems to exist: spending out of additional UI benefits is greatest on the luxury item, vacations and trips. Thus, while the sizes of the responses differ, additional UI benefits in both subsamples are spent disproportionately on luxuries.

Table 3.1 showed that UI recipient households spend a greater fraction of their after-tax incomes on necessities than do other households. The earlier predictions are thus completely corroborated: UI recipient households that are forced to cut consumption do so by cutting out luxuries; this shows up as a reduced share of luxuries in total spending. If given additional UI benefits, and thus the chance to restore part of their reduced consumption, the analysis presented in table 3.5 indicates that they spend most of the higher UI benefits on the luxury items that were cut out.

How would a reduction in UI benefits resulting from the retirement-income restriction affect the pattern of spending on commodities? It should be noted first that, because the restriction would bear most heavily upon higher-income households (see chapter 2), and because higher-income households usually find benefits adequate and are not likely to suffer reduced consumption (see above), the effects of the restriction are likely to be quite small. To the extent they arise, though, the implication is that spending on luxuries would bear the brunt of any reduction in spending: it has been shown empirically that UI recipient households that must cut spending do so (rationally) by reducing spending on luxuries.

Conclusions and Inferences

Having examined in chapter 2 what a retirement-income restriction would do to the distribution of income in the older population, it was intended in this chapter to examine whether the restriction would impose hardship, in the form of sharp reductions in consumption. In order to do this, it was necessary to measure the fraction of older households for whom unemployment now represents a hardship, in the sense that the household is forced to reduce consumption because UI benefits, along with savings or borrowed funds, are inadequate to maintain spending. Whether such reductions are more likely to be observed among higher- or lower-income households was also examined. Finally, the data were analyzed to see whether those households that are forced to reduce consumption cut their spending on luxuries or on necessities; clearly, if necessities were cut out one would have to view the inadequacy of benefits, and the reduction in UI benefits that would result from the retirement-income restriction, as more serious.

Using subsamples of UI recipient and other households from the Retirement History Survey for 1970 and 1972, spending propensities out of UI benefits were examined and compared to spending out of other forms of income. While the results differ between the two subsamples, this comparison allowed the inference that, at most, half of the households in which UI is received find benefits inadequate. For at least half, it can be inferred from their spending behavior that savings, borrowed funds, UI benefits, or some combination of the three are sufficient to prevent reductions in consumption. From the estimates it can be concluded that those older households that must reduce consumption—for which benefits are inadequate as the term was defined—are more likely to be households in which income is low even when all labor force participants in the household are employed. Finally, and perhaps somewhat consolingly, those households that are forced to reduce consumption during periods of unemployment appear to do so chiefly by reducing spending on the luxuries they had been consuming. Obversely, if given additional UI benefits, they would restore their total consumption by increasing spending particularly on the luxuries they had cut out.

Although maintaining consumption is an important goal of UI, it is only one of the things the program is aimed at. Conclusions about the desirability of the retirement-income restriction cannot be drawn solely on the basis of findings in this chapter, as they relate to only one of the program's goals. Nonetheless, the findings do provide some suggestions that should be considered when conclusions for policy are drawn (chapter 5). (1) That the majority of households finds benefits to be adequate implies that one should not be extremely concerned that the restriction will impose still greater burdens on most older households. (2) Even among those households that must reduce consumption when unemployed, the reduction is mainly in their spending on goods one would classify as luxuries. Thus the restriction, and the implied reduction in UI benefit payments it entails, will not seriously affect spending on necessities by those households which will be forced to cut consumption. (3) Unfortunately, the greater likelihood of reductions in consumption among low-income households that occur when a household member is unemployed means that, to the extent that the restriction reduces benefits accruing to low-income households, its effects will be more severe. Even though UI was not originally intended as a program aimed at equalizing incomes, it has accreted some features (benefit maxima and, in some states, higher replacement rates for earnings losses of low-wage workers) that in fact make it do this to some extent. Given this *de facto* goal, one should be concerned in drawing policy conclusions that potential detrimental effects on low-income households be minor.

Chapter 4
Unemployment Insurance and Retirement: Work Incentive or Disincentive, Windfall or Discouragement

Introduction

The issue in this chapter is how UI affects the labor market behavior of older people. The numerous studies of its effects on the supply side of the labor market (see Hamermesh 1977) have pointed out how it might in general: (1) Increase the duration of spells of unemployment; (2) Induce more frequent spells of unemployment; and (3) Induce workers loosely attached to the labor force to spend more time in the labor force, both time employed and time unemployed. In the population of workers 55 and over, a fourth effect of UI—a changed probability of permanent labor force withdrawal—becomes a relevant possibility. The purpose of this chapter is to analyze this possibility using the data from the Retirement History Survey.

As the title of the chapter indicates, there are four possible ways that the payment of UI benefits to older persons might be related to their probability of retirement. First, the receipt of UI payments might induce a postponement of retirement that increases production of goods and services in the economy. By providing older, unemployed workers with a payment whose continued receipt is contingent upon continued labor force attachment, the UI program might maintain their attachment even after they exhaust UI benefits. This *incentive effect* might work by giving the older UI recipient the means of financing productive job search that might otherwise not have been undertaken. (However, as shown in the previous chapter, by inference the majority of older recipients appear to have funds for this purpose.) Second, UI may provide a *disincentive effect*. Older UI recipients who might otherwise have remained in the labor force after they finish receiving benefits might find the leisure-time activities engaged in while receiving benefits to be more enjoyable than anticipated. This discovery may induce them to refuse subsequent job offers that they might otherwise have accepted.

UI benefits may induce no change in the behavior of older recipients. Instead, they may merely increase the income of part of the older population without changing the amount of time the UI recipient spends employed. This is especially likely where UI benefits are paid with little monitoring of job search activities of recipients. In this third case, UI is a *windfall* for those older workers who receive it; there is no effect on the recipient's labor market behavior, nor does the individual's unemployment experience lead him to change his retirement plans. Fourth, the person who received UI may become *discouraged* about his job prospects and retire. Like the windfall effect, this too implies that UI is not being used to finance job search that will pay off, and unlike the disincentive effect, the receipt of UI benefits induces no change in retirement behavior. Rather, and unlike the windfall effect, the *experience* of unemployment causes the worker to revise his plans and retire rather than continue looking for work.

The next section analyzes these effects in more detail and considers how they may be distinguished from one another empirically. Subsamples are then formed from the Retirement History Survey, their characteristics are discussed, and use of the data to estimate the impact of UI benefits on retirement behavior among older recipients is described. The estimates of the effect of the amount of benefits received on the probability that an older worker is not in the labor force, or states he is retired, are then considered and discussed, and the implications for the retirement-income restriction are considered in the concluding section.

Issues in Estimating the Relation of UI to Retirement Status

The potential incentive and disincentive effects of UI benefits upon the older worker's decision to retire flow from the same arguments made elsewhere (Hamermesh 1977) about the effects of UI on recipients' unemployment duration. These are: (1) The *incentive* effect—an induced reduction in the length of spells of unemployment—that would arise if UI benefits enable recipients to search for work more efficiently and if that search results in their finding jobs more quickly than they otherwise would; and (2) The *disincentive* effect—an induced increase in the length of spells of unemployment—that would occur if the benefits reduce the recipient's desire to return to work. Both of these effects may be operating, though the abundant empirical research suggests the disincentive effect is greater for most recipients. On net, UI benefits increase the duration of spells of unemployment.[1]

These two alternative effects would be relatively unimportant for older workers if they acted only during the particular spell of unemployment that is compensated by UI benefits. They need not be small, though, for the older worker if the inducement they provide is coupled with stickiness of workers' decisions about whether to participate in the labor force. It is known, for example, that those in the labor force are very likely to stay in, and that those who leave the labor force are likely to stay out. Any incentive provided by UI that makes the job search more effective will thus induce long-lasting effects in postponing retirement. Conversely, any disincentive it gives that lengthens unemployment spells or makes job-finding slower can induce long term increases in the probability of being retired. The potential effects, coupled with stickiness in labor force behavior, may be rather substantial.[2]

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[1] Hamermesh (1977) shows that the strong consensus of past work is that UI induces a net increase in the duration of unemployment, though there is less agreement about its magnitude.

[2] While this notion is probably unimportant for prime-age males, it has been demonstrated by Heckman (1977) to be important as a description of the dynamics of labor supply among married women. Heckman and Willis (1977) also show that such stickiness exists for married women, and, we may infer, for other groups in which the average participation rate is not very high.

The incentive effect is a positive, *causative* relation between the amount of UI benefits (or UI recipient status) and the older recipient's subsequent decision to remain in the labor force. The disincentive is a negative, causative relation between these same observable phenomena. Both imply that UI induces a change in behavior from what would have occurred had the benefits not been received. Insofar as the older UI recipient also receives retirement income, the proposed retirement-income restriction would induce changes in retirement patterns if it became effective: it would increase retirement rates if UI currently provides older workers an incentive to stay in the labor force, and would decrease them if the major effect is now a disincentive to remain in the labor force.

The third possibility is that UI induces no change in retirement behavior, but that it functions as a *windfall* accruing to workers who have already decided to retire. There is good reason for an older person who wishes to retire to seek to use UI benefits in this manner. First, most older workers did not expect the rates of price increase that have occurred in the past fifteen years and are very interested in taking any extra transfer income they can to increase consumption toward what it would have been had they been able to anticipate inflation better. Second, the Social Security system offers some slight inducements to postpone the initial receipt of benefits. The primary insurance amount is reduced somewhat if one begins receiving benefits between ages 62 and 64, and is increased very slightly if benefits are delayed beyond age 65.[3] Thus, if the receipt of UI enables the worker to postpone receiving Social Security benefits, it will increase his *per-period,* though probably not his lifetime, amount of such benefits received.[4]

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[3] In 1973, a person who began drawing Social Security benefits at age 62 received on average 80 percent of the monthly payment he would have received at age 65. Conversely, if he waited until age 68 to claim benefits, his monthly benefit would be 3 percent higher than what it would have been had he retired at age 65. (Social Security Administration, *Social Security Handbook,* 1973.)

[4] Even ignoring discounting, a person who retired in 1973 at age 65 would have to live beyond age 77 in order to accumulate as large a lifetime retirement benefit as would accrue to someone who retired at age 62. Thus it is unlikely that this effect will be very great, but its direction is nonetheless clear.

The existence of the windfall effect would imply that the receipt of UI benefits does not change retirement behavior among older UI recipients, and thus that a retirement-income restriction on UI benefits also would not. Nonetheless, the windfall effect would have substantial implications for the UI program and for a restriction. For example, it would mean that some older UI recipients draw benefits with no intention of seeking work, but instead view the benefits as a supplemental form of retirement income. Unless claims officers are clever at enforcing work-seeking requirements, the older recipient who wishes to use UI benefits to cushion his entry into retirement can succeed in what amounts to an illegitimate use of the system. (It is illegitimate because the recipient is not really available for work.) These considerations would argue in favor of a restriction as a way of circumventing the difficulty in discerning who is truly available for work.

The windfall effect implies a negative relation between the amount of UI benefits (or recipient status) and subsequent decisions to remain in the labor force. This relationship is not a causative one, but it is in the same direction as that implied by the disincentive effect. As such, the disincentive and windfall effects will be difficult to distinguish from one another, as both will lead us to observe that higher recent UI benefits are associated with higher current probability of being retired. One way to make a distinction is to use the possible interaction between UI and postponed filing for Social Security benefits to make some inferences about which effect is the more likely. In particular, there can be no interaction before age 62, since workers below age 62 are ineligible for Social Security. Thus, if UI payments serve to postpone receipt of Social Security among those 62 and over, one should observe a greater effect of UI on retirement among those 62 and over than among those younger. It could then be inferred that the windfall effect is important. If no differences in the effects of UI by age are observed, it may be concluded that there is no postponement motive, and thus that the disincentive effect is important. (Clearly, if no relationship is observed between UI recipient status or benefits received and retirement status, it must be inferred that neither the windfall nor the disincentive effect has empirical support.)

If a positive relation is found between UI recipient status, or total benefits received, and a subsequent greater likelihood of being out of the labor force or retired, it may be inferred that the disincentive or windfall effect is important. A skeptic would argue, though, that this merely shows that the older unemployed worker is out of the labor force because of the unavailability of jobs rather than because he has chosen to retire. This *discouragement* relation between receipt of UI benefits and subsequent labor force status may exist. One way of controlling for the problem is to hold constant the individual's labor force status in the year prior to the receipt of UI benefits. This would account for any inherent differences in attitudes toward work that may affect individuals' labor force attachment.

A second approach followed here is to consider the kinds of workers whose retirement behavior is more likely to be affected by the receipt of UI benefits (if there is a disincentive effect), or who are more likely to retire in the expectation of receiving a windfall in the form of UI benefits as they start their retirement. If something more than the lack of available jobs is producing the relation between UI benefits and subsequent retirement status, it should be most important for workers whose prior attachment was to firms that were not effectively experience rated. In such firms, it costs the employer nothing in UI taxes to lay the older worker off and have him receive UI benefits as he moves into retirement. Indeed, the employer benefits as other workers, seeing such a "golden handshake" being offered, become more willing to work for him. In firms that are effectively experience rated, this behavior will not occur frequently, as it costs the employer something to do it. If a relation between UI benefits and subsequent retirement is found, it can thus be determined whether it is caused by the disincentive or windfall effects, or by the lack of job availability, by examining how the relation differs depending upon the worker's prior industry attachment.

Data Used and Other Factors Affecting the Impact of UI on Subsequent Retirement

As is done throughout this monograph, here too subsamples are formed from the Retirement History Survey to test the hypotheses. Because the ideas are explicitly based on comparing receipt of UI at one point to retirement status later, and to hold constant for earlier labor force attachment, the longitudinal nature of the RHS is invaluable. However, unlike the analyses in chapters 2 and 3 which focused properly on household behavior, the individual is the appropriate object of attention in studying retirement, since it is the individual who retires or works. (As will be seen, though, his decision may be affected by circumstances in the household.)

Because a substantial body of research has shown that retirement behavior of married men differs fundamentally from that of single men and women, the analysis concentrates on the former group only.[5] This narrows somewhat the applicability of the findings, but the price is worth paying to ensure that the results are not rendered meaningless because they do not appropriately embody the behavior of *any* single group in testing the hypotheses. The sample is also confined to white married men, as some recent evidence suggests an extraordinary fraction of older nonwhite males retires on disability payments, and thus that their behavior too differs fundamentally from that of white married males.[6]

Subsamples are formed from the 1971 and 1973 waves of the RHS. The sample restrictions result in 1,664 married men ages 60-64 in 1971, and 2,060 married white men ages 62-67 in 1973.[7]

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[5] Irelan et al. (1976) present evidence from the Retirement History Survey that shows how greatly retirement behavior differs among married men, single men, and single women. Clark, Kreps, and Spengler (1978) document the determinants of retirement and their different effects among various demographic groups.

[6] See Siskind (1975) for evidence on the impact of disability payments on participation rates of older nonwhite males.

[7] Workers age 65 in the 1971 RHS are excluded from the subsample for that year so that our results can reflect behavior that is based exclusively on persons not yet eligible for full OASI benefits.

Table 4.1 presents a breakdown of each group by age. Of the 1971 subsample, 115 drew UI in 1970; 98 of the 1973 group drew UI in 1972. Clearly, the number of UI recipients in the subsamples is small. Whether this is a drawback can be judged by whether or not the number is large enough to produce a significant relation between the amount of UI benefits received, or recipient status, and subsequent probabilities of being employed or being retired.

As in the two previous chapters, one might question whether the subsamples of white married males are representative of the entire RHS, and thus of such men in the entire older population in the United States. No claims are made that the subsamples represent unmarried men, nonwhites or women, so that the results can only be applied to gauging the impact of policy on white married men. However, some comparisons suggest strongly that the subsamples are quite representative. For example, 39.9 percent of the 1971 subsample had 12 or more years of schooling compared to 37.9 percent for all men in the 1971 RHS; 16.7 percent had at least some college, as compared to 16.5 percent in the RHS (see Irelan et al. 1976). These figures are very close, and the differences are consistent with the exclusion of blacks and unmarried men. Similarly, 30.4 percent of the men in the 1971 subsample reported in 1969 that their health interfered with their work, compared to 35.0 in the RHS. This too is a fairly close correspondence, with the differences again likely caused by the exclusion of blacks and unmarried men (see footnote 6).

As another set of checks on the representativeness of the sample, consider the sample statistics shown in table 4.1 on the percent of individuals in the labor force. This decreases with age, as one should expect. Moreover, except for workers 65-67 in 1973, it is close to that reported for white males in the 1970 Census; white married males ages 60-64 had a labor force participation rate of 77.4 percent in the 1970 Census, somewhat above the sample average of 71.5 percent for 1971 shown in table 4.1. Moreover, the lower percentage in the labor force among those 62-64 in 1973 than in 1971 is consistent with the size of the observed decline in participation of older workers in the labor force generally during this period. The only serious inconsistency with published data is

Table 4.1
Labor Force Participation, Retirement Status, and UI Experience of White Married Males, 1971 and 1973[a]

					UI experience in previous year		
			Self-reported retirement status		Received UI		
	Number in subsample	Percent in labor force	Percent fully retired	Percent partly retired	Number	Percent of subsample	Average amount per recipient
1971							
Total	**1,664**	**71.5**	**24.2**	**6.4**	**115**	**6.9**	**$ 718**
		(1.1)	(1.0)	(0.6)		(0.6)	(58)
Ages 60-61	720	82.2	13.8	3.6	53	7.4	638
		(1.4)	(1.0)	(0.6)		(0.9)	(77)
Ages 62-64	944	63.3	32.1	8.6	62	6.6	784
		(1.5)	(1.5)	(0.9)		(0.8)	(83)
1973							
Total	**2,060**	**45.1**	**50.9**	**12.5**	**98**	**4.8**	**$1,012**
		(1.1)	(1.1)	(0.7)		(0.6)	(76)
Ages 62-64	1,119	60.1	36.2	9.6	64	5.7	1,017
		(1.5)	(1.4)	(0.9)		(0.8)	(99)
Ages 65-67	941	27.3	68.3	15.9	34	3.6	1,003
		(1.5)	(1.5)	(1.2)		(0.7)	(115)

a. Standard deviations of the means are in parentheses.

that in the 1970 Census the labor force participation rate of white married males 65-69 was 41.7 percent, far above that in the 1973 subsample for those 65-67, the younger group in this five-year age range.[8]

The measure of labor force status presented in table 4.1 is based on questions like those used in the Current Population Survey. It forms one of the foci of our discussion of the effects of prior receipt of UI benefits. However, the person's subjective report on his retirement status may be an equally interesting measure of whether he is really seeking work. Accordingly, the same measure is used as in chapter 3, namely, the individual's self-reported retirement status. The possible responses are that the person is fully retired, partly retired, or not retired. From these, measures are formed of: (1) Whether the person is fully retired or not; and (2) Whether he is partly retired or not. (Since they are based on different questions, they do not necessarily add to 100 percent with the percentage in the labor force.) As the sample statistics in table 4.1 show, the probability that a person is partly or fully retired rises with age, as one would expect. Examining whether higher values of these two measures are associated with prior receipt of UI benefits will provide part of the test for the presence of the incentive, disincentive, windfall, or discouragement effects.

The data on UI benefits received cover the entire calendar year prior to the survey date. However, the test of the hypotheses depends on obtaining measures of UI benefits received during spells of unemployment *completed* prior to the time at which the data on labor force or retirement status are obtained. Because the interviews on which the RHS is based were conducted in April-June biennially, it is certain, given durations of spells of unemployment, that UI income in the previous year was for a spell of unemployment that for almost all recipients was completed by the time of the interview in the following year.[9] Thus for nearly all the UI recipients in the subsamples, there is information on UI benefits received in a spell of unemployment completed prior to the date the information on their employment or retirement status was obtained. The average amounts of UI benefits received are shown in table 4.1. As in tables 2.1 and 3.1, the table shows that the average increases as the respondents in the RHS age. As before, it can be noted that the small increase between 1970 and 1972 in the average weekly benefits paid under the UI program (see chapter 2) suggests that the average time during which UI benefits are received rises sharply as the sample ages. The relation between the amount of compensation received and later labor force status is, of course, the focus of this chapter's inquiry.

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[8] White males 55-64 decreased their labor force participation from 83.3 percent of the population to 79.0 percent between 1970 and 1973. The comparable figures for white males 65+ are 26.7 percent and 22.8 percent. (See *Employment and Training Report of the President*, 1978.)

In order to make this inquiry, the analysis relates the probability that a person is in the labor force, and the probabilities that he responds he is fully retired or partly retired, to other factors. (See Appendix C for the equations reflecting these relationships.) It then examines how these probabilities, ranging between zero and one, are affected by UI recipient status in the previous year, and whether those with longer compensated spells of unemployment, and thus greater total UI benefits received, behave differently from those who had short spells (received small amounts of benefits). (This implicitly assumes that total benefits received are a proxy for the duration of compensated unemployment.) In order to isolate these effects, though, it is necessary to hold constant for other factors that affect the probability of retirement. Fortunately the choice of these factors is simplified by the substantial body of available research on the determinants of retirement. The evidence suggests:

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[9] Since only three small states in 1970 had a potential duration in excess of thirty weeks, nearly everyone who received UI benefits for a spell of unemployment beginning before October 1 would have completed that spell by April of 1971. Assuming a uniform distribution of the starting dates of spells, that means surely three-fourths of spells in the sample that were compensated in 1970 had to be complete by the time the interview questions about labor force status were asked. For the one-fourth of spells that began in the last quarter of 1970, and thus whose average starting date was November 15, 1970, the average UI benefits received in the subsample implies an average duration of 12 weeks, assuming conservatively that the weekly benefit was $60. Only for a small fraction of the group, those whose spells exceeded 18 weeks duration, could the spell not have been complete by the interview date. We may conclude that, in the 1971 subsample, much less than one-fourth of one-fourth—six percent—may still have been receiving UI on the interview date for a spell that began in 1970. For the 1973 subsample the figure is likely to be only slightly higher.

(1) Older workers are more likely to be retired, though whether this is because of the natural effects of aging or because of induced economic effects is unclear (see Boskin 1977 and Quinn 1977). Accordingly, the examination of the effects of UI benefits on subsequent retirement or employment status holds constant for the individual's age.

(2) Because of the confusion over the causes of the relation between age and retirement status, many researchers have tried to abstract from health problems that may induce early retirement. (See Parsons 1977; Grossman and Benham 1974; and Scheffler and Iden 1974.) All have used the individual's own statement about his health status. This approach is followed, using the person's response to a question about whether his health limits his ability to work. However, in order to avoid building an artificial relation between retirement status and health status, the person's health status as reported two years before he reported his employment or retirement status is used.

(3) Labor force participation increases, or the probability of retirement decreases, as the amount of education a person has attained is greater (Bowen and Finegan 1969; Scheffler and Iden 1974). This well-known relationship is accounted for by controlling for whether the person graduated from high school or completed some college, or whether he completed college or beyond.

(4) Studies have shown that a husband is more likely to retire if his wife is not healthy, or if his wife is not attached to the labor force (Boskin 1977; Parsons 1977). This is accounted for, along with the biases it might induce in the estimates of the relation between UI and subsequent retirement status, by controlling for the wife's labor force status as a determinant of the probability that the husband is retired.

(5) Several studies have found that individuals with greater income from assets are more likely to retire early (Barfield and Morgan 1969; Boskin 1977; and Quinn 1977). Others have shown that higher wages are associated with a lower probability of retirement, while still other researchers find no effect of wage rates on retirement status. To account for all these findings, and to control for any spurious relation between UI benefits and retirement status that might be induced if this effect were ignored, the income in the man's household two years prior to the survey date is held constant.

(6) As noted in the previous section, many factors that cannot be measured may affect retirement, particularly individual differences in the desire to work. To account for these, the analysis controls for the man's employment status two years before the survey date (when the effect of UI benefits on the probability of being in the labor force later is estimated), and for his prior retirement status (when the effect of benefits on the subsequent probability of his stating he is fully retired, partly retired, or not retired at all is examined).

Estimates of the Effect of UI Benefits on the Labor Force and Retirement Status of White Married Males

Table 4.2 presents estimates for the 1971 subsample of the effects of each of the factors discussed above on the probability that a white married male is in the labor force, or that he is fully or partly retired based on his own statement. The effects are given in percentage points; each coefficient shows the effect, in percentage point terms, of a one-unit increase in the factor. For example, in column (1) the change of -28.1 shows that each additional $1,000 of UI benefits received in 1970 is associated with a decrease of 28.1 percentage points in the probability that the average person in the subsample was in the labor force in 1971. Similarly, the change of 4.5 percentage points in that column implies that men whose spouses worked in 1971 had a probability of being in the labor force that was 4.5 percentage points above that of men whose wives did not work. The asterisk next to a particular change

Table 4.2
Effects of UI and Other Factors on Labor Force and Retirement Status of Married White Males Ages 60-64 in 1971, N = 1,664

Factor	Percentage point change in the probability of being:[a]		
	In labor force	Fully retired	Partly retired
Received UI 1970	3.5	-11.8*	5.2*
	(.72)	(-2.58)	(1.50)
UI dollars 1970 (in thousands)	-28.1*	18.6*	1.9
	(-5.48)	(3.92)	(.52)
Age 62 or older	-12.9*	11.7*	4.6*
	(-7.55)	(7.33)	(3.82)
Spouse worked	4.5*	-4.4*	-1.2
	(2.50)	(-2.62)	(-.96)
Health limited 1969	-11.3*	9.8*	2.7*
	(-5.51)	(5.09)	(1.84)
Household income 1968 (in thousands)	-.1	.1	-.2*
	(-.59)	(.98)	(-1.55)
Completed high school or some college	2.6*	-3.3*	-.4
	(1.37)	(-1.88)	(-.29)
Completed college	6.5*	-7.4*	-.6
	(1.90)	(-2.33)	(-.22)
Employed 1969	65.1*		
	(26.27)		
Fully retired 1969		74.1*	-4.6*
		(27.80)	(-2.29)
Partly retired 1969		32.8*	18.5*
		(8.33)	(6.22)

a. t-statistics, ratios of the estimated effects on probabilities to their standard errors, are shown in parentheses.

*The effect on the probability is different from zero at the 90 percent level of confidence.

denotes that there is a statistically significant relation between the particular factor and labor force (or retirement) status. In particular, when the number in parentheses exceeds 1.28, we can be 90 percent sure that the effect exists.

Before discussing the results on the effects of UI in the 1971 subsample (table 4.2), and the 1973 subsample (table 4.3), it is worth noting whether the effects of the other factors are the same as has been noted in previous research. (If not, it would suggest very little credence should be attached to any inferences drawn here about the effects of UI.) As a consideration of the effects in both tables shows, nearly all of these measures have significant effects on the probability of being in the labor force, of being fully retired, and of being partly retired. As do previous studies, these findings indicate that: (1) Older persons are more likely to be retired or out of the labor force; (2) Having a working spouse increases the older married man's labor force attachment; (3) Having a long term health problem reduces labor force attachment; (4) Higher family income also reduces labor force attachment and increases the probability the man views himself as fully retired, though the effect is small and, for men 60-64 in 1971, not statistically significant; and (5) The more educated the man is, the more likely he is to be in the labor force, and the less the likelihood that he views himself as fully or partly retired. Every one of these findings accords with previous work, suggesting any inferences drawn about the effects of UI on retirement are based on an analysis that produces estimates consistent with earlier research on other determinants of retirement.

It is interesting to note that, with the exception of the health measure, each factor had a greater effect on the likelihood a person is in the labor force, or fully retired, in the 1973 subsample than in the 1971 subsample. Each factor becomes more important as workers age. This finding is strengthened by a consideration of Appendix tables C.1-C.4, in which the same probabilities are estimated for the 1971 and 1973 subsamples classified by age subgroups. The greatest effects are for workers ages 65-67, the smallest for workers 60-61. It is not just that older workers are more likely to be retired; rather, any factor that induces retirement has a stronger effect the older the worker is.

Table 4.3
Effects of UI and Other Factors on Labor Force and Retirement Status of Married White Males Ages 62-67 in 1973, N = 2060

	Percentage point change in the probability of being:[a]		
Factor	**In labor force**	**Fully retired**	**Partly retired**
Received UI 1972	8.7*	15.4*	2.4
	(1.28)	(2.84)	(.44)
UI dollars 1972 (in thousands)	-21.4*	-11.4*	6.4*
	(-4.04)	(-1.63)	(1.52)
Age 65 or older	-17.2*	15.8*	6.8*
	(-9.33)	(8.17)	(4.56)
Spouse worked	7.4*	-8.3*	3.5*
	(3.72)	(-4.09)	(2.22)
Health limited 1971	-9.6*	10.2*	-2.1*
	(-4.08)	(4.12)	(-1.33)
Household income 1970	-.4*	.4*	-.2*
(in thousands)	(-3.16)	(3.14)	(-1.38)
Completed high school	3.2*	-2.9*	-1.6*
or some college	(1.62)	(-1.45)	(-1.48)
Completed college	10.5*	-9.4*	-5.7*
	(3.04)	(-2.65)	(-2.08)
Employed 1971	51.7*		
	(24.60)		
Fully retired 1971		52.8*	-8.1*
		(22.45)	(-4.44)
Partly retired 1971		6.8*	.295*
		(1.92)	(10.81)

a. t-statistics, ratios of the estimated effects on probabilities to their standard errors, are shown in parentheses.

*The effect on the probability is different from zero at the 90 percent level of confidence.

The major focus of this chapter is on the effect of UI benefits on the probability of being in the labor force, or being retired, among older married white men. Those with short spells of unemployment (who received UI but only a tiny amount of benefits) have a slightly higher probability than nonrecipients of being in the labor force in each subsample. (This is shown by the positive effect of "received UI" in the tables.) In the 1971 and 1973 subsamples, those who receive large amounts of UI benefits are more likely to be out of the labor force than nonrecipients.[10] The most important issue, of course, is how UI benefits affect the average older recipient's retirement behavior. As derived in Appendix C from the estimates in table 4.2, in the 1971 subsample the average UI recipient is 16.7 percentage points less likely to be in the labor force than the average nonrecipient. In the 1973 subsample the average UI recipient is 13.0 percentage points less likely to be in the labor force than the average nonrecipient. There is virtually no doubt that the average older male UI recipient is less likely to be in the labor force later on than his counterpart who did not receive UI. The evidence strongly refutes the hypothesis that, on net, UI produces an incentive effect that raises subsequent labor force participation. It is, though, consistent with both a causative disincentive effect, and the correlation that is implied by the windfall hypothesis and the discouragement effect. Which of these possibilities is correct is the subject of the next section of this chapter.

Before trying to distinguish empirically among the three explanations, one should consider the effects of UI on the person's subjective appraisal of his retirement status. In the 1971 subsample, the average UI recipient is 1.6 percentage points more likely to view himself as fully retired, and 6.6 percentage points more likely to view himself as partly retired than is the average nonrecipient. In the 1973 subsample, the comparable figures are 3.9 and 8.9 percentage points. (Again, see Appendix C.) It may be concluded that UI benefits are not only associated with subsequent lower labor force participation, but they are also related to persons viewing themselves as fully, and especially as partly, retired.

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[10] For example, in the 1971 subsample a person who received $100 in benefits in 1970 was .7 percentage points (3.5 - 28.1 x .1) more likely to be in the labor force in 1971 than someone who received no benefits. A person who received $1,500 in benefits was 38.7 percentage points (3.5 - 28.1 x 1.5) less likely to be in the labor force in 1971.

Disincentives, Windfalls, or Discouragement

In an earlier section, two tests were proposed to distinguish whether receipt of UI produces a disincentive effect or a windfall effect, or whether discouragement explains the greater tendency of prior UI recipients to be out of the labor force. All effects were consistent with a negative relationship between UI benefits and subsequent labor force status, and such a relationship was observed. Since the implications of the three effects for the labor market impact of the retirement-income restriction differ substantially, it is essential to perform any tests that might discriminate which effect is actually operating. The first test discriminates between the windfall and disincentive effects. It involves examining how the effect of UI on later labor force status differs by age group. The argument was that the windfall effect is consistent with a greater impact of UI benefits on subsequent labor force behavior for workers 62 and over than for those below age 62, because UI might provide for the older worker household's needs early in retirement and thereby allow the older worker to postpone filing for OASI benefits and thus obtain a larger monthly benefit later on, as implied in the epigraph.

Table 4.4 presents estimates of the differences between UI recipients and nonrecipients in their average labor force participation rates during the survey periods. These are presented for the 1971 and 1973 subsamples of white married males ages: (1) 60-61 in 1971; (2) 62-64 in 1971; (3) 62-64 in 1973; and (4) 65-67 in 1973. The differences are based on estimates presented in Appendix C, tables C.5 and C.6, and they are adjusted to reflect differences between UI recipients and nonrecipients along all the factors—spouse's work status, education, household income, etc.—that have been held constant in order to isolate the effect of UI benefits on subsequent participation in the labor force. Also shown for comparison purposes are the average labor force participation rates for all men in each subsample, and for each age subgroup.

Table 4.4
Adjusted Differences in Labor Force Participation Rates Between UI Recipients and Nonrecipients Among Older Married White Males, by Age, 1971 and 1973

Survey year and age group	Average labor force participation rate (percent)	Adjusted percentage point differences in labor force participation rates: UI recipients compared with nonrecipients
1971		
Total age 60-64:	**71.5**	**-21.4**
Age 60-61	82.2	-25.4
Age 62-64	63.3	-20.4
1973		
Total Age 62-67:	**45.1**	**-14.6**
Age 62-64	60.1	-32.7
Age 65-67	27.3	-23.1

Let us compare the adjusted differences by age subgroup. Among workers 60-61 in 1971, the average participation rate for all UI recipients was 25.4 percentage points less than that for nonrecipients. Among those 62-64, the average rate for recipients was 20.4 percentage points less in 1971, and 32.7 percentage points less in 1973. Finally, among those 65-67 in 1973, the average person who received UI in 1972 was 23.1 percentage points less likely to be in the labor force in 1973 than the average nonrecipient in that age group.

On a relative basis, let us compare the differences in participation rates to the average participation rate in the subgroup. These calculations clearly show that there is a stronger effect after age 61; for example, the effect is -25.4 percentage points on an average rate of 82.2 percent for those 60-61; for people 65-67 the effect is -23.1 percentage points on an average participation rate of 27.3. Even on an absolute basis, though, the same conclusion may be drawn by comparing the estimated reductions in participation for the cohort of persons age 60-61 in 1971 and 62-64 in 1973.

The evidence is fairly clear that UI benefits reduce subsequent labor force participation more among those 62 and older than among those 60-61. This supports the conclusion that the windfall effect is a better explanation of the observed negative relation between UI benefits and later labor force participation among older married white men than is the disincentive hypothesis.

The second test was designed to distinguish between the windfall effect and the discouragement hypothesis—the possibility that the negative relation between UI benefits and later labor force participation reflects discouragement about the availability of jobs. Part of any impact of discouragement in the estimates is removed when holding constant for earlier labor force participation. Many persons who would be discouraged by unemployment have only a tenuous attachment to the labor force, and adjustment for that has been made. The finding that UI benefits are negatively related both to subsequent participation *and* subsequent subjective views on one's retirement status also strengthens the conclusion that the discouragement effect is not important. A man who is discouraged may well drop out of the labor force, but would perhaps be less likely to view himself as retired. Nonetheless, a formal test can aid in providing further discrimination between the windfall and discouragement possibilities.

As noted earlier, the windfall effect will be greatest when experience rating of UI taxes is ineffective for the recipient's former employer (when increases in benefits charged to the employer cannot raise the firm's UI tax rate since it is already at the maximum rate). Becker (1972) has shown that long term cost/tax ratios are far above 1.0 in mining, construction, and manufacturing in the states he surveyed. The average firm in these industries is thus more likely than the average firm in other industries to be ineffectively experience rated, and thus more likely to be willing to lay off older workers seeking to receive UI benefits as they move toward retirement. Ideally, one would like to use data on the actual UI tax rate of the firm in which each person in the sample was employed. Because such information is not available, it is necessary to distinguish among UI recipients by their previous industry of attachment to reflect possible differences in the effectiveness of the experience rating of their employers' taxes. This deficiency clearly biases the tests against finding any relation between the degree of experience rating of the UI taxes on one's former employer and one's subsequent labor force participation, and thus against the windfall hypothesis. Thus, if any small difference is found between subsequent retirement behavior by UI recipients last employed in mining, manufacturing, and construction, as compared to other recipients, it may be inferred that the true differences are larger and that there is evidence against the discouragement, and for the windfall, hypothesis.

The test is performed by reestimating the effects of the various factors discussed on the probability of labor force participation of the men in the 1971 and 1973 RHS subsamples. This is done in such a way as to allow inferences of: (1) Whether the men whose current or most recent job attachment was in mining, manufacturing, or construction (MMC) have different subsequent labor force participation rates from other workers; (2) Whether UI recipients from MMC have a different rate of subsequent participation compared with recipients in other industries; and (3) Whether the impact on subsequent participation of longer duration of benefits (proxied by total amount of benefits received) differs for recipients from MMC compared with those in other industries. (The method for accomplishing this reestimation is shown in Appendix C.) To ensure that the focus is only on those likely to be eligible for UI in 1972 (or 1970), those who were not employed in 1971 (1969) were deleted from the samples. This left 1,360 people in the 1973 subsample, and 1,372 in the 1971 subsample.

The relative effects of the three factors discussed in the previous paragraph are shown for the two RHS subsamples in table 4.5.

(These effects are adjusted for differences in spouse's work status, education, etc. among nonrecipients, recipients from MMC, and other recipients.) It should be noted that in the 1971 subsample, none of the relative effects is significantly different from zero (although the implications of the directions of the effects are the same as those for 1973 discussed below). In that subsample, at least, either the discouragement effect predominated, or the weakness of the test (because of the inability to get a good fix on the UI tax status of each worker's former employer) prevents a discrimination between the windfall and discouragement effects. Accordingly, the discussion concentrates on the 1973 results. The first figure in the second column shows that the average older married white male worker employed in mining, manufacturing, or construction in 1972 was 8.3 percentage points less likely to be in the labor force in 1973 than his counterpart in other industries. The difference is likely due to greater requirements on physical strength in these industries and the greater prevalence of negotiated or imposed mandatory retirement provisions.

The interesting results are implied by the second and third differences in column (2) of table 4.5. The second adjusted difference implies that the average UI recipient from MMC differs hardly at all in his likelihood of being in the labor force later as compared to his counterpart in other industries. However, each extra thousand dollars in UI benefits reduces the probability of subsequent participation much more for workers laid off from MMC than for others. As an example, the differences imply that workers who received the average amount of UI benefits were only 8.7 percentage points *less* likely to be in the labor force later if they had worked in MMC than in other industries. However, a worker who received $1,000 more than the average recipient, and who had worked in MMC, was 36.4 percentage points *less* likely to be in the labor force later than comparable workers in other industries. Assume weekly benefit amounts did not differ among recipients from the two groups of industries. Then, the conclusion is that long term UI recipients from MMC are more likely to be out of the labor force later on than are long term recipients on layoff from other industries. This conclusion, and the fact that the average recipient's behavior differs very slightly between the two industry groups, implies that the short term recipients from MMC are more likely than others to remain in the labor force.

Table 4.5
Adjusted Differences in Labor Force Participation Rates of UI Recipients and Other Older White Married Males, by Industry of Employment and by Amount of UI Benefits Received, 1971 and 1973 Subsamples

Basis of comparison	Adjusted percentage point difference in participation rates[a]	
	1971	1973
Workers in mining, manufacturing or construction (MMC) compared with workers in other industries	-.002 (-.01)	-8.3* (-3.07)
UI recipients with benefits $1,000 above the average from MMC compared with recipients with benefits $1,000 above the average from other industries	2.1 (-.16)	-8.7 (-.39)
UI recipients with benefits $1,000 above the average from MMC compared with recipients with benefits $1,000 above the average from other industries	-11.7 (-.63)	-36.4* (-1.04)

a. t-statistics, ratios of the estimated effects on probabilities to their standard errors, are shown in parentheses.

*The effect on the probability is different from zero at the 90 percent level of confidence.

The third difference by itself suggests that among older workers formerly employed in these industries where experience rating was imperfect, meaning many employers pay the maximum tax rate, those workers who receive large amounts of UI benefits (and thus presumably have long compensated spells of unemployment) are less likely to be in the labor force in the following year than similarly long term unemployed workers in other industries. This implies that, where it costs the firm little to lay off a worker wishing to retire and also collect UI benefits in the process, a greater incidence of this effect is found. This is additional evidence for the importance of the windfall effect, and at least weak evidence against the hypothesis that the negative relation between UI benefits and later participation reflects older long term beneficiaries becoming discouraged workers.

Conclusions and Implications

This chapter has examined the relationship between UI benefits and subsequent retirement status among older married white males. A number of reasons have been proposed why the two might be related, and a number of tests have been performed aimed at discriminating from among these reasons. A substantial negative relationship was found between UI benefits and labor force participation among older workers. The validity of this finding is strengthened by the corroboration the estimates provide of past results on the determinants of labor force behavior among older males. Further, since the estimates held constant for differences in family characteristics, for educational attainment, and, most important, for prior labor force attachment, it is unlikely that the negative correlation found between receipt of substantial UI benefits and lower labor force participation is spurious.

The correlation is greater among men ages 62-64 than among men 60-61. From this comparison, it may be inferred that UI may not be inducing early retirement, but may instead be acting partly as a pure windfall to those who have already decided to retire. Thus, restricting UI benefits on the basis of retirement income will neither hasten nor postpone retirement. Instead, it will reduce incomes of persons who would retire anyway.

In a sense, the windfall that UI represents for workers deciding to retire is a retirement bonus, but it is one that many firms assigned the maximum tax rate can pay at no cost. A weak test has indicated that the windfall effect is more important among workers in industries where experience rated taxes are more likely to be at the maximum. This suggests that the employer whose UI taxes are not effectively covering his UI costs in a sense colludes with the older worker wishing to receive UI benefits as he begins his retirement. This finding, and the fact that the estimates hold constant for labor force status two years before the survey date, imply that the negative relation between UI benefits and subsequent labor force participation does not just reflect discouragement among older workers about job prospects.

The behavior suggested by the evidence is understandable: it makes good sense for older workers to use UI benefits to cushion the path to retirement. It suggests that the retirement-income restriction will have no effect on retirement and labor force decisions by older workers. Since UI benefits appear in many cases to be a windfall to those who have already decided to retire, removing the benefits will not change those persons' behavior. The restriction is thus one solution to the misuse of benefits, though it is a solution that also affects older persons seriously interested in searching for work. Obviously, if the work test were made more stringent, fewer UI funds would be misused in this way. At the same time, older claimants whose spells of unemployment are short, and for whom, the results suggest, UI induces a slight increase in labor force participation, would face little if any reduction in UI benefits, as they appear to make substantial efforts to return to work.

On the surface, a stricter work test has an easy appeal as a solution to the misuse of UI benefits implied by these findings. It would be consistent with preventing part of the older population from using administrative difficulties in the program to convert this labor market insurance program into a pure transfer to them. However, there are problems with this solution, and they are discussed in detail in the concluding chapter.

Chapter 5
The Role of Unemployment Insurance in the Labor Market for Older Workers: Conclusions and Suggested Reforms

Findings

These empirical studies of UI and the consumption and labor market behavior of older workers and of their income distribution have with varying degrees of certainty reached a number of conclusions.

(1) Unemployment insurance equalizes the distribution of income among older workers compared to what it would be in the absence of UI benefit payments. This finding implies that anything that increases benefit payments to the *average* older worker will increase income equality within the older population. Further, since households headed by older workers are in general less well off than the average American household, any policy that specifically decreases UI accruing to older workers will decrease income equality across demographic groups stratified by age.

(2) The uniform federal restriction that reduces UI payments to workers receiving pensions or OASI retirement benefits would, in the early 1970s, have reduced those payments by more than one-fourth among workers 59-64 years old, and by over 40 percent among workers 61-66 years old. Such a restriction, enacted in the 1976 UI Amendments, P.L. 94-566, will thus substantially reduce the total amount of UI benefit payments accruing to older Americans. As such, because older Americans are generally less well off than others, it will increase the income gap between older workers and others.

(3) *Within* the population of households headed by older workers, the federal restriction on the simultaneous receipt of UI

and retirement income will reduce income inequality. This is because a majority of those older workers receiving both types of income are in the upper deciles of the distribution of income in the older population. The restriction bears most heavily on better-off older households. A federal restriction will thus decrease inequality of income within an age group over the lifetimes of the group's members, but increase it if compared across age groups.

(4) Though the retirement-income restriction will hurt mainly better-off older households, the evidence in chapter 3 suggests that the ability to maintain consumption during periods of unemployment is greatest among these households. Indeed, the availability of prior liquid savings, or the ability to borrow to maintain living standards when unemployed, increases steadily as families with lower lifetime incomes are compared to those with higher incomes.

(5) Within the population of older UI recipients it appears that about half have access to past savings or to borrowing in sufficient amounts so that limits on UI benefits do not cause hardship, in the sense of substantial reductions in spending. Nearly a majority of older UI recipients are able to smooth consumption to avoid sharp reductions in living standards during periods of unemployment.

(6) Those families that do not have savings and cannot borrow easily when the head is unemployed cut back disproportionately their consumption of luxury goods. Conversely, the UI benefits received by them are spent to restore purchases of such goods.

(7) UI benefits do not work to keep recipients in the labor force in subsequent years; nor do they provide a disincentive that induces workers to leave the labor force. Instead, they appear to be extra income for workers that does not affect their decision to leave the labor force. Similarly, they seem to be associated with, but do not cause, older workers regarding themselves as retired.

(8) The relation between prior receipt of UI benefits and current labor force status is much stronger among workers 65-67 than among those 62-64, and stronger in the latter group than among those 60-61 years old. This finding, and the fact that job availability is held constant for each individual, supports the

inference that UI functions as an income transfer to workers who have made the decision to retire.

(9) The negative relation between UI and subsequent labor force attachment is strongest for workers with long-duration unemployment and those who previously worked in industries where the experience rating of UI taxes is most likely to be ineffective. The former result indicates that short term claimants are not using UI as a cushion into retirement, and that the problem is concentrated among longer term claimants. The latter result is consistent with the observation that this misuse of UI by some older workers may be viewed as a form of tacit collusion between the worker and his employer. Because the benefits do not raise the employer's UI tax liability, he is willing to collude with the worker and in doing so to acquire the reputation—one which lowers his future labor costs—of being a good employer to work for.

Arguments on What Should Be Done

The arguments for and against allowing pensioners to draw UI benefits can be classified as logical—based on the view that federal intervention in state UI programs should be minimized; as economic efficiency arguments—based on the desire to improve public well-being by reducing disincentives to work or to employ resources in their most productive uses; and as equity arguments—based on a desire to reduce income inequality. Let us examine each of these sets of arguments in turn, considering for each first those that suggest no retirement-income restriction should be placed on the amount of UI payments, and then those that imply such restrictions should be imposed.

There are three logical arguments against imposing any restrictions:

(1) As it now stands, there are no other federal standards on disqualifying income, potential duration, or amount of regular

state UI benefits.[1] A federal restriction on UI benefits for pensioners imposes the first such federal standard and opens the door to substantial further federal intrusions.

(2) Individuals who are laid off—and who are thus involuntarily out of work—should be able to maintain their incomes and consumption regardless of their age and pension status as long as they are available and seeking work. (This argument is the major one made by Murray 1967, page 37.) Why should those who are attached to the labor force and interested in working, but who happen to be 60 or over, be discriminated against?

(3) To ensure that claimants, be they pensioners or not, maintain an attachment to the labor market, UI claims officials in the states are supposed to make sure that claimants are actively seeking work. This is true for pensioners as well, and, if the rules are applied properly, it ensures that those pensioners drawing benefits are not avoiding work.

Each of these arguments can be contradicted by corresponding logical objections:

(1) Admittedly, once one imposes a federal standard on UI and retirement income one cannot logically argue against further federal standards. Yet such logical rigor imposes a discipline which would likely make many opponents of a federal restriction very uneasy. For example, organized labor does not argue against the restriction because it objects to federal intervention: it recognizes that it has repeatedly urged Congress to impose federal standards, even federally mandated uniformity, on benefit

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[1] The current absence of federal standards on disqualifying income, benefit amounts, etc. is the main argument used in National Commission on Unemployment Compensation, *Interim Report,* November 1978, for letting the pension restriction in P.L. 94-566 lapse. (The Commission did, though, recommend that the entire issue of benefit standards be considered.) Early in the history of the issue, Senator Humphrey argued, *Cong. Record* 87:1, S4196 March 16, 1961, that imposition of a federal standard regarding retirement income and UI would be inconsistent with the states' rights views of many of the supporters of such a standard.

structures in regular state UI programs.[2] Similarly, one cannot argue against the restriction on a logical basis and then urge Congress to enact legislation "equalizing costs" of UI among states.[3]

(2) To what extent is the layoff of an older worker really involuntary on the worker's part? Both economic theory (Feldstein 1976) and empirical work (Hutchens 1979) suggest that otherwise identical workers in states with more liberal UI benefit structures and less experience rating of taxes are more likely to be laid off. Chapter 4 demonstrates empirically that there is a greater incidence of subsequent retirement among long term UI claimants in those industries where experience rating is relatively ineffective. This finding is consistent with the observation that, for some older workers seeking to retire, a layoff is the result of an implicit agreement that makes them *and their employer* better off. The layoff gives some older workers temporary additional income to supplement their pensions in the early stages of retirement. For their employers, payroll taxes may not increase, and the employer may be able to obtain more qualified workers if he can acquire the reputation of being a good employer in this sense.

(3) The job search provisions of state UI laws are essential to them, yet a massive weight of evidence (summarized in Hamermesh 1977) suggests that UI benefits do provide a disincentive to return to work. This being the case, one cannot claim that local UI offices can in fact distinguish perfectly which workers have a serious attachment to the labor market. This may not be the fault of the local UI officials: their administrative funding has simply not kept pace with the rise in the number of

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[2] See, for example, the 1975 AFL-CIO Resolution, reported in National Commission for Manpower Policy, *Proceedings of a Conference on Labor's Views on Manpower Policy,* Special Report No. 6, 1976. The resolution states that, "The AFL-CIO has long supported federalization of the unemployment insurance program . . . " and goes on to call for minimum standards of two-thirds of the worker's weekly wage.

[3] See, for example, cost equalization proposals like those proposed by Congressmen Carr and Brodhead, 96th Congress, H.R. 1572 and H.R. 3937.

insured unemployed.[4] Thus, even if one felt that local UI offices could enforce job search requirements in the 1960s, one would be less willing to hold that view in light of the relative decline in funding of employment security administration since the early 1970s. The implications of this decline are likely to be especially severe for efforts to monitor the activities of older workers. As seen in chapter 2, many of them have access to retirement income, and numerous studies have shown (see, e.g., Bowen and Finegan 1969) that such income reduces the labor force attachment of older workers. This suggests that the older workers will, if job-seeking requirements are not carefully enforced, be much more likely than others to have little interest in moving off UI benefits and into employment.

One might argue against the retirement-income restriction on efficiency grounds: UI may provide older workers with the income to finance productive job search that would not be undertaken if UI benefits were not provided. Thus the inducement UI provides the worker to stay in the labor force is beneficial, for it overcomes the disincentives caused by people's inability to borrow to finance job search. The counter-argument is based on the findings in chapter 4: most older workers do not prolong their attachment to the labor force if they receive substantial amounts of UI benefits. There is no incentive effect that would help the labor market operate more efficiently. There is also no disincentive that implies a decrease in labor market efficiency. Rather, since the payment of UI benefits to pensioners appears not to affect their behavior, on the benefit side at least, any restriction will neither remove nor introduce further disincentives into the labor market. However, as the payment of these benefits must be financed by higher taxes, which may distort employers' decisions about the kinds and number of workers to hire, what is neutral on the benefit side may produce a loss of efficiency overall because of its effects on the tax side.

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[4] For example, federal grants for employment security administration in 1967 dollars totalled $620 million in 1969, $959 million in 1973, and $1,010 million in 1977. At the same time, the number of insured unemployed rose from 1.177 million in 1969, to 1.793 million in 1973, to 3.111 million in 1977. (Calculated from Bureau of the Census, *Compendium of Government Finances,* 1964; *Idem., State Government Finances,* 1969, 1973, and 1977; and *Economic Report of the President,* 1979.) Clearly, fewer resources per UI recipient have been devoted to the administration of state employment security administration programs. This does not prove that monitoring of work-seeking efforts has become less stringent. However, we know that most of the political pressure is aimed toward the timely payment of claims, and anecdotal evidence from state and federal UI officials suggests that the emphasis has indeed shifted toward this. Accordingly, we may reasonably conclude that monitoring activities have suffered.

Because the evidence provides little support for efficiency arguments on either side of the restriction issue, the importance of equity arguments is enhanced. Among the justifications for allowing pension recipients to receive UI benefits are:

(1) As seen in chapter 1, older households have lower incomes than the average household in the United States. Cutting those incomes still further by reducing these households' receipts of UI benefits will further increase this income gap.

(2) As has been argued in Congress, pension and OASI retirement benefits are woefully inadequate.[5] As a matter of equity UI benefits are needed to supplement retirement benefits so that older workers do not suffer unduly.

Countering these arguments are a number of considerations that imply the restriction would have a less detrimental effect on the income distribution and on commonly held concepts of fairness.

(1) Though older households are, on average, not so well off as others, the restriction on UI benefits will, as seen in chapter 2, impinge chiefly upon those households in the upper half of the income distribution among older workers. Thus those households that will experience the most severe decline in UI benefit income will suffer least from the restriction. Moreover, as seen in chapter 3, their consumption behavior suggests that better-off older workers have access to prior savings and borrowed funds. Sharp cutbacks in their receipts of UI benefits would not appear to have a severe detrimental impact on their living standards.

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[5] See, for example, the statements of Senators Javits and Nelson, *Cong. Record,* 94:2, S17004 and S17017, September 29, 1976.

(2) Even though older workers as a group are not so well off as others, the income gap results to some extent from their lower average educational attainment. One can argue that their lifetime incomes do not differ so much from the average in the population as their current incomes would suggest, because they began earning income early in life and thus earned income for more years. Why, so the argument goes, should they then receive additional subsidies late in life?

(3) Finally, and perhaps most telling, if pension and other retirement benefits were inadequate in the 1960s, they are, as seen in chapter 1, surely more adequate today. Pension benefits and, to a much larger extent, OASI retirement benefits have increased significantly as a fraction of prior earnings since that time, resulting in a narrowed income gap between older workers and others.

What can one conclude from this welter of arguments pro and con on the issue of restricting UI benefits for pensioners? The most sensible conclusion is that anyone who believed that such a restriction was improper in the 1960s because of inadequate pension and OASI benefits should admit that his arguments are less applicable now. Anyone who favored a restriction then should be even more favorably disposed toward one today on these grounds. Good equity grounds have been shown for believing that such a restriction will not harm those families most in need. Part of the support for this view stems from the findings in chapters 2 and 3. Part comes, too, from the realization of the tremendous improvements in retirement benefits that have occurred in the past fifteen years. It has also been demonstrated that older married white male UI claimants, with long unemployment spells, especially those in industries that are not well experience rated, merely use UI benefits to ease their path into retirement. This finding, obtained in chapter 4, had not been observed earlier. Finally, it appears that, despite the rules requiring active job search, it is often administratively impossible with the resources available to discriminate from among older workers those who are actively seeking work. Given these arguments, many of which would not have been valid in the 1960s, the introduction of a broader restriction on the simultaneous receipt of UI benefits and retirement income does not appear harsh or unreasonable. This is especially so if, in recognition of the greater reduction in labor force attachment that accompanies increased retirement income, it is imposed as a dollar-for-dollar reduction, as in most states and in the federal legislation, rather than as an outright disqualification.

Possibilities for Reform

Clearly the ideal solution to the problems outlined in this monograph is to avoid the issue by instituting a more discriminating enforcement of job-search requirements imposed upon older UI claimants. Whether a sufficiently discerning enforcement is even possible without too great an imposition on the claimant's freedom is doubtful. It is surely impossible, though, with the level of funding of employment security administration that has existed in the 1970s or appears likely in the future. Thus this ideal solution cannot in practice be implemented successfully.

A variant on the ideal solution is that definitions of suitable work be relaxed for older workers with retirement income who are long-duration claimants, say above 13 weeks in a benefit year, and who are not certified by their employer to be on temporary layoff. That this is done only for older workers may appear discriminatory, but it recognizes the crucial distinction made in the previous section: the older worker who receives retirement income has less incentive to seek work while receiving UI than do other workers. Suitable work requirements were relaxed in the legislation extending Federal Supplemental Benefits in 1977, so there is some precedent for this (though applying this to regular benefits imposes a new federal standard on benefits).[6] However, if each state passed such a requirement, it would help ensure that the older long-duration claimant would take a job if one were available, and it would reduce reliance on the discretion of the local claims officer. This change is consistent with the observation that the seniority most older workers have ensures that, if they are not on temporary layoff, they are likely to be people whose jobs have disappeared. Thus, requiring them to take a less-skilled job that becomes available is not likely to hurt their longer term labor market chances, both because their previous jobs are no longer there, and because their remaining work life is short. The problem with this solution is that it would face vigorous legal challenges on the grounds that it constitutes discrimination by age. To make the requirement apply beyond the thirteenth week of unemployment to claimants of all ages may mean imposing a harsher work requirement than is desirable on younger claimants whose skills may be eroded in a new, less demanding job that they would be forced to take. In short, while a broader definition of suitable work appears to be a reasonable answer to the problem of discerning which older workers have a serious labor force attachment, in fact it too suffers from flaws that are so severe as to require a search for other alternatives.

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[6] Section 104 of P.L. 95-19 defines suitable work as "any work which is within the individual's capabilities," and goes on to require that "emergency compensation shall not be payable . . . if during such week such individual fails to accept any offer of suitable work or to apply for any suitable work to which he was referred by the State agency."

The economic arguments of equity and improved efficiency in the functioning of the labor market militate in favor of some better method of ensuring that older workers receiving UI maintain an attachment to the labor market. *Faute de mieux,* the best way to do that appears to be to recognize that the receipt of retirement income is a signal that the person's labor market attachment is reduced; the more retirement income, the clearer the signal. This recognition, and the realization of the severe practical difficulties of applying work tests thoroughly, implies that the best solution is that *each state* should *on its own* enact a requirement that would reduce UI benefits one dollar for each dollar of pension or OASI retirement benefits received in the week of unemployment claimed. Such a requirement would be a compromise between complete disqualification and continuing a system which, as has been shown, is used by many older people, especially those who are better-off financially, to cushion their move into retirement. It would remove the first example of a federal benefit standard for regular UI benefits. (The FUTA law already has an implicit federal tax standard.) It would embody a recognition of recent changes in the levels of support that other sources provide for older Americans. It would implicitly recognize the difficulties inherent in applying job-search requirements that may be too narrow and certainly are often neglected by local office staffs that are often fully occupied just with taking claims.

The basis for this proposal is a judgment that the gains from a uniform federal restriction are outweighed by the cost of introducing the first important federal standard on UI benefits. However, if federal standards are imposed on other aspects of the benefit structure, for example on states' maximum benefits, or if a federal "cost equalization" or a "reinsurance" program that involves continuing or repeated subsidies to certain states is enacted, any objection to the federal restriction on the simultaneous receipt of retirement income and UI benefits should disappear. At that point, the restriction contained in the 1976 UI Amendments, and that became effective in 1980, would be justified. Until that time, and despite the gains in terms of equity and maintenance of public confidence in the federal-state UI system, the political cost of a major federal benefit standard appears too great. This would suggest that, unless other federal benefit standards become law, the *federal* standard restricting receipt of UI and pensions should be repealed.

This does not mean there is no legitimate role for federal legislation that would lessen the problems discussed and demonstrated in this study. In particular, it is quite consistent with existing federal intervention in regular state UI programs for Congress to enact, as part of the experience rating provisions under FUTA, a requirement that defines experience rating in such a way that tax schedules are broadened and fewer employers are ineffectively experience rated. Aside from its beneficial impact on many other aspects of the UI program (see Hamermesh 1977), this would help reduce the number of employers willing to see their old employees receive UI as they move into retirement. As such, it would ameliorate the problem by federal action without the introduction of federal benefit standards.

The cost of doing nothing, of continuing in most states to allow pensioners to receive full UI benefits, is the hidden one of a continued reduction in public confidence in the UI system. Given the ease of the remedies at hand—both the imposition through state legislation of dollar-for-dollar restrictions on the receipt of UI by pensioners, and federally-imposed requirements for improved experience rating—these costs need not continue to be borne. Nor do new costs, in the form of federal benefit standards that would represent a fundamental departure from the past history of the federal-state UI program, need to be imposed. The problem can be ameliorated within the framework and past history of the UI program, and it can be done in a way that is consistent with commonly-held notions of fairness and that does not impose additional real economic costs on society.

Appendix A

DISTRIBUTIONS OF INCOME AND UI BENEFITS IN THE RETIREMENT HISTORY SURVEY SUBSAMPLES

Table A.1 presents Gini ratios and Suits statistics (see Suits, 1977, for a discussion of these latter). The Gini coefficients listed in table A.1 may appear somewhat high to the reader familiar with the literature on income inequality in the United States. In fact, they are quite consistent with Taussig's (1973) results on a cross section of families in 1967. While the Gini coefficient for his entire sample was .417, it was .429 for households headed by individuals ages 55-64 and .653 for those headed by individuals ages 65 or over.

The Suits statistics in the second row are lower than the values reported in Ehrenberg, Hutchens, and Smith (1978), where numbers between -.47 and -.50 appear. Nonetheless, our estimates do suggest that UI benefits equalize distribution of income. Also, as a comparison of the statistics in the second and third rows of table A.1 shows, the statistics become more negative in the 1970 and combined samples, indicating more equalization of the distribution of incomes across households when the retirement-income restriction is simulated. The opposite is the case in the 1972 sample.

Table A.1
Measures of Inequality of Income and UI Distributions, 1970, 1972, and Combined Subsamples

Measure	1970	1972	Combined
Gini ratio on all other income	.4306	.4272	.4178
Suits statistics on UI			
Actual amount received	-.3685	-.1537	-.2709
With retirement income restriction	-.4035	-.1056	-.3384

Appendix B

EQUATIONS AND EXTENSIONS OF CHAPTER 3

For each UI recipient, let Z be the minimum of UI benefits received in years t and t-2 (a two-year lag because of the two-year hiatus between interviews in this panel of data). Then we define transitory UI benefits as $U'_t = U_t - Z$, where U_t are UI benefits in year t. Permanent income is defined as:

$$YP_t = .5(Y_t + Y_{t-2}) + .5(2U'_t + 2U'_{t-2}) + Z,$$

where Y is non-UI after-tax income, and YP is our measure of permanent income.[1] The first term is an average of income flows other than UI in the two years; for nonrecipient households, it is the definition of permanent income. The second term is designed to reflect the lost income replaced by UI, and it implicitly assumes a constant replacement rate of 50 percent. (Without data on state of residence, this is the best that can be done.) The third term is just that part of UI benefits that can be viewed as permanent, in the sense that it is received each year. Transitory income is simply $YT_t = Y_t - YP_t$.

In the equations to be estimated we assume each unconstrained UI recipient household (those like the Joneses) consumes the i'th spending category according to:

$$C_i = a_{i0} + a_{i1}YP + a_{i2}(YT + U'), \quad i = 1, \ldots, N, \qquad \text{(B-1)}$$

where C_i is consumption of the i'th spending category, N is the number of categories, the a_{i0} are constants, and the a_{i1} and a_{i2} are marginal spending propensities out of permanent and transitory income. Because our cross section data include income observed only biennially, part of any measure of "transitory income" may contain permanent components.[2] To capture this possibility we include transitory income even for the unconstrained UI recipient household, but we expect $a_{i1} > a_{i2}$. A household that does not receive UI will consume according to (B-1), except that for it $U' = 0$.

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[1] In order to make the income data for the various years comparable, Y_{t-2} and U_{t-2} were blown up by the change in average income in the sample between years t-2 and t. Between 1968 and 1970 this was 6.57 percent, and between 1970 and 1972 it was 7.39 percent.

The constrained UI recipient household (one like the Cohens) consumes the i'th commodity as:

$$C_i = a_{i0} + a_{i1}\,YP + \gamma_i\,(YT + U')\,, \quad i = 1, \ldots, N, \qquad \text{(B-2)}$$

where $\gamma_i = a^* a_{i1}$, and a^* is the inverse of the marginal propensity to spend on all consumption items, including those for which we have no data.[3] Specifying the equation in this way ensures that, if we had complete data, spending propensities by constrained households would sum to one, as the discussion in chapter 3 requires. Taking a weighted average of (B-1) and (B-2), with α, the fraction of households that finds benefits to be adequate, as one weight, and $(1 - \alpha)$ as the other:

$$C_i = a_{i0} + a_{i1}\,[YP + (1 - \alpha)(YT + U')\,a^*] + a_{i2}\alpha(YT + U'),$$
$$i = 1, \ldots, N.$$

Since we wish to include in our estimation observations for households that have no UI benefits, and because nonrecipient households are assumed to consume just as do unconstrained households, this equation can be respecified as:

$$C_i = a_{i0} + a_{i1}[YP + (1 - \alpha)a^*(YT + U')D]$$
$$+ a_{i2}\,[(1 - D) + \alpha D]\,(YT + U'), \quad i = 1, \ldots, N, \qquad \text{(B-3)}$$

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[2] Holbrook and Stafford (1971), in a study of total consumption out of different types of income based on panel data, treat transitory income received in nonconsecutive years as uncorrelated, and assume people have a horizon of two years or less. This view suggests that the deviation from the average of incomes in two nonconsecutive years may be viewed partly as a component of permanent and partly as a component of transitory income.

[3] We use a value of a^*, 1.122, based on time-series results in Hamermesh (1979).

where D is an indicator variable equalling one if the individual receives UI benefits. Equation (B-3) is the one on which the estimates in table 3.3 are based.

Tables B.1 and B.2 present the estimates of the coefficients of the demographic and retirement-status variables included in equations (B-3). It is important to include these seven variables: A test of their significance in the estimates for 1972 yielded a X^2 statistic of 396. The 99 percent point of the X^2 distribution with 28 degrees of freedom is 48.28. For 1970 the value is $X^2(21) = 114$, also significantly different from zero. There is substantial variability in the coefficient estimates between the two subsamples. However, we still find, as the tables show, that in several cases the estimates are significant and in the same direction in both years. (1) Female-headed households and those in which the head is fully retired spend significantly less on transportation than do others; (2) Households in which there is a married couple, and even more so, where there are children, spend significantly less on vacations than other households; and (3) Those in which the head is partly retired or is a woman spend significantly more on housing.

Equations (B-3) were modified to make α a function of YP, thus enabling us to test whether the likelihood that benefits are inadequate varies with permanent income. We specify $\alpha = \alpha$ (YP) using the logistic function:

$$\alpha(YP) = \frac{1}{1 + \exp[-.001\,\beta_0\,(YP - \overline{YP}) + \beta_1]}, \qquad \text{(B-4)}$$

where β_0 and β_1 are parameters to be estimated. In the specification in which α was assumed constant, equations (B-3) were estimated by ordinary least squares for fixed values of α on the grid (0, .05, .1, . . . , 1) to find that value of α that maximized the likelihood function of the system. The specification of α in (B-4) as a function of YP is estimated by a two-round procedure that first specifies a broad lattice of values of (β_0, β_1) and then searches a finer lattice around that pair of values that maximized the likelihood function on the first round. In the 1970 subsample the estimates are $\hat{\beta}_0 = .75$ and $\hat{\beta}_1 = -3.5$ for the combined spending categories and for the set of equations (B-3). In the 1972 subsample the maximizing values were $\hat{\beta}_0 = .45$ and $\hat{\beta}_1 = 6.5$ for both.

Table B.1
Estimates of Effects of Demographic and Work Status Variables on Spending by Older Workers, 1970

	Effects on spending on: [a]			
Variable	**Transportation**	**Vacations and trips**	**Housing**	**All three categories**
Married male	-8.79	-38.2	80.2	33.3
	(-.21)	(-1.39)	(1.12)	(.38)
Female	-84.6	63.6	343	323
	(-1.96)	(2.20)	(4.58)	(3.52)
Children in household	16.1	-32.3	21.7	5.51
	(.69)	(-2.06)	(.53)	(.11)
Fully retired	-104	52.0	72.1	19.7
	(-3.70)	(2.75)	(1.47)	(.39)
Partly retired	28.1	22.9	106	157
	(.70)	(.85)	(1.51)	(1.83)
White	-39.1	-11.4	15.6	-34.9
	(-1.00)	(-.44)	(.23)	(-.42)
Age in years	4.98	1.40	-3.09	3.29
	(.70)	(.29)	(-.25)	(.22)

a. t-statistics in parentheses.

Table B.2

Estimates of Effects of Demographic and Work Status Variables on Spending by Older Workers, 1972

	Effects of spending on: [a]				
Variable	**Food**	**Transportation and gasoline**	**Vacations and trips**	**Housing**	**All four categories**
Married male	351	2.84	-227	368	496
	(7.56)	(.05)	(-4.22)	(3.66)	(3.71)
Female	-183	-146	-56.7	306	-80.3
	(-3.71)	(-2.59)	(-.99)	(2.86)	(-.57)
Children in household	-139	9.77	-50.81	-1.26	-181
	(-6.22)	(.38)	(-1.97)	(-.03)	(-2.82)
Fully retired	-157	-52.7	53.1	-19.8	-177
	(-5.04)	(-1.47)	(1.47)	(-.29)	(-1.96)
Partly retired	-219	-6.86	-3.12	240	11.4
	(-5.28)	(-.14)	(-.07)	(2.68)	(.10)
White	115	-23.3	-5.76	182	269
	(2.35)	(-.41)	(-.10)	(1.71)	(1.90)
Age in years	-4.82	-12.6	13.53	36.7	32.8
	(-.59)	(-1.36)	(1.45)	(2.09)	(1.41)

a. t-statistics in parentheses.

Equations (B-3) are a restricted version of:

$$C_i = \beta_{i0} + \beta_{i1}YP + \beta_{i2}YT(1 - D) + \beta_{i3}(YT + U')D,$$
$$i = 1, \ldots, N, \qquad \text{(B-5)}$$

where the β_{i1} are parameters to be estimated. The estimates of (B-5) are presented in table B.3 for the 1970 and 1972 subsamples. The log likelihood ratio for the significance of the regression as a whole is $-2 \log \lambda$, against the alternative that there is only random variation in the consumption measures. The regressions as a whole are all highly significant, as were those on which the estimated spending propensities shown in table 3.3 are based. More important, though, is the test of the constraints on (B-5) implied by (B-3), the model that forms the basis of our discussion. These constraints essentially restrict spending on each commodity out of UI to stand in the same ratio to spending out of permanent income. Thus a test of the constraints is explicitly a test of our hypothesis that spending on different categories out of UI is not proportionate. The test statistics for the 1970 and 1972 subsamples are $X^2(2) = 2.96$, and $X^2(3) = 4.29$ respectively. These are not significantly different from zero at the 90 percent level, though they are not ridiculously small either. They suggest that, undoubtedly because of the relatively small number of UI recipient households, there is not enough variation to permit so finely structured an hypothesis to be properly tested.

Despite the insignificance of the differences between the restricted and unrestricted models in equation sets (B-3) and (B-5), the differences are in the expected direction. The responsiveness index shown in table 3.5 is calculated as:

$$R_i = \left(1 + \frac{1}{S_i} \left\{ \hat{\beta}_{i3} - [(1 - \hat{\alpha})a^{*}\hat{a}_{i1} + \hat{\alpha}\hat{a}_{i2}] \right\} - B \right) 100,$$

where B is the same as the term in braces, { }, evaluated using coefficients from equations like (B-3) and (B-5), but based on spending in all categories; and S_i is the share of the i'th category in

Table B.3
Estimates of Parameters in Equations (B.5), 1970 and 1972

	Coefficients, 1970[a]			Coefficients, 1972[a]		
		Transitory UI and other income			Transitory UI and other income	
Spending category	Permanent income	UI recipients	Nonrecipients	Permanent income	UI recipients	Nonrecipients
Food				.0581* (23.96)	.0306 (.85)	-.0007 (-.09)
Transportation[b]	.0358* (13.91)	.0178 (.59)	.0219* (2.46)	.0403* (14.50)	.0352 (.85)	.0423* (5.02)
Vacations and trips	.0528* (30.62)	.0171 (.84)	-.0097* (-1.62)	.0622* (22.18)	.0643* (1.54)	.0121* (1.42)
Housing	.1897* (42.45)	-.0364 (-.69)	.0279* (1.80)	.1640* (31.20)	.1544* (1.97)	.1335* (8.37)
-2 log λ		3058.33*			3555.80*	

a. t-statistics in parentheses.

b. Includes gasoline in 1972.

*Denotes significance at least at the 90 percent level.

spending on all categories. Thus the index equals 100 for spending on all categories. $\hat{\beta}_{i3}$ is just the estimated (unrestricted) propensity to spend out of UI. The first term in brackets weights spending by the estimated fraction, $(1 - \hat{\alpha})$, of households for which benefits are inadequate; the second term is for the fraction, $\hat{\alpha}$, for which benefits are adequate. A higher value for the index R_i will occur if spending propensities on the i'th category out of UI in (B-5) are disproportionately high as compared to the average for constrained and unconstrained households in (B-3).

Appendix C

EQUATIONS AND METHODS USED IN ESTIMATING THE IMPACT OF UI BENEFITS ON LABOR FORCE AND RETIREMENT BEHAVIOR AMONG OLDER MARRIED WHITE MALES

Tables 4.2 and 4.3 are based on the equation:

$$L = \alpha_0 + \alpha_1 \text{RECDUI} + \alpha_2 \text{UI\$} + \sum_{i=1}^{N} \beta_i X_i + \alpha_3 E_{-2}, \quad \text{(C-1)}$$

where L equals a zero-one variable indicating participation in the labor force; UI$ indicates the amount of UI benefits the man received (in thousands of dollars); RECDUI equals one if the man received any benefits, zero otherwise; the X_i are the demographic and other control variables; E_{-2} is employment status two years before the sample survey date; and the α_i and β_i are parameters to be estimated. In the equations for full and partial retirement status, the variable L is replaced by zero-one dummies for these two responses, and the variable E_{-2} is replaced by the same retirement variables observed in the previous wave of the RHS. Although there are problems with the method (see below), tables 4.2 and 4.3 present estimates produced by ordinary least squares.

Tables C.1 - C.4 present estimates of the basic equations (C-1) for the two RHS subsamples disaggregated by age. They are qualitatively (though not, as we noted in the text, quantitatively) similar to the estimates for the entire subsamples. The fractions of variation explained are fairly high for this kind of analysis, as were those in the equations for which the results are reported in tables 4.2 and 4.3. In the 1971 subsample, the R^2 values were .425, .453, and .050 in the equations for labor force participation, full retirement status, and partial retirement status. The corresponding coefficients of determination for the equations reported in table 4.3 are .373, .349, and .103.

Table C.1
Effects of UI and Other Factors on Labor Force and Retirement Status of Married White Males Ages 60-61 in 1971, N = 720

	Percentage point change in the probability of being:[a]		
Factor	In labor force	Fully retired	Partly retired
Constant	29.5* (7.79)	6.3* (3.07)	2.1* (1.30)
Received UI 1970	-.1 (-.02)	-8.3* (-1.72)	11.0* (2.86)
UI dollars 1970 (in thousands)	-24.3* (-3.58)	5.3 (.95)	-4.3 (-.98)
Spouse worked	3.5* (1.60)	-2.7* (-1.52)	-1.5 (-1.02)
Health limited 1969	-16.0* (-6.22)	11.4* (5.25)	4.3* (2.46)
Income 1968 (in thousands)	.2 (.75)	-.1 (-.46)	-.04 (-.31)
Completed high school or some college	1.6 (.69)	-2.8* (-1.43)	.7 (.47)
Completed college	-.9 (-.20)	-3.7 (-1.04)	2.8 (1.01)
Employed 1969	63.3* (18.24)		
Fully retired 1969		78.9* (22.56)	-2.8 (-.99)
Partly retired 1969		29.9* (5.63)	14.9* (3.52)
R^2	.464	.559	.046

a. t-statistics in parentheses.

*Denotes significance at the 90 percent level or better.

Table C.2
Effects of UI and Other Factors on Labor Force and Retirement Status of Married White Males Ages 62-64 in 1971, N = 944

	Percentage point change in the probability of being:[a]		
Factor	In labor force	Fully retired	Partly retired
Constant	13.1*	16.9*	10.7*
	(3.35)	(6.26)	(5.33)
Received UI 1970	6.1	-12.9*	.4
	(.78)	(-1.74)	(.08)
UI dollars 1970 (in thousands)	-30.1*	25.5*	6.1
	(-4.07)	(3.57)	(1.14)
Spouse worked	5.2*	-5.3*	-1.2
	(1.92)	(-2.04)	(-.60)
Health limited 1969	-7.5*	8.3*	1.5
	(-2.48)	(2.84)	(.69)
Income 1968 (in thousands)	-.3	.3*	-.2*
	(-1.16)	(1.45)	(-1.43)
Completed high school or some college	3.4	-3.9*	-1.3
	(.79)	(-1.42)	(-.62)
Completed college	12.4*	-10.7*	-3.4
	(2.46)	(-2.20)	(-.95)
Employed 1969	66.3*		
	(19.37)		
Fully retired 1969		72.4*	-5.3*
		(19.34)	(-1.91)
Partly retired 1969		34.5*	20.1*
		(6.34)	(4.97)
R^2	.373	.380	.045

a. t-statistics in parentheses.

*Denotes significance at the 90 percent level or better.

Table C.3
Effects of UI and Other Factors on Labor Force and Retirement Status of Married White Males Ages 62-64 in 1973, N = 1119

	Percentage point change in the probability of being:[a]		
Factor	In labor force	Fully retired	Partly retired
Constant	15.1* (4.00)	23.9* (8.32)	10.4* (5.16)
Received UI 1972	5.6 (.66)	-5.6 (-.67)	-2.7 (-.46)
UI dollars 1972 (in thousands)	-20.5* (-3.14)	14.3* (2.22)	7.7* (1.70)
Spouse worked	6.9* (2.57)	-7.8* (-2.93)	2.3 (1.22)
Health limited 1971	-9.8* (-3.28)	8.1* (2.73)	-1.9 (-.92)
Income 1970 (in thousands)	-.01 (-.07)	.18 (.83)	-.1 (-.69)
Completed high school or some college	3.0 (1.05)	-2.5 (-.91)	-2.6 (-1.32)
Completed college	5.6 (1.10)	-6.0 (-1.19)	-6.8* (-1.93)
Employed 1971	57.3* (16.94)		
Fully retired 1971		63.6* (17.01)	-1.4 (-.52)
Partly retired 1971		16.5* (2.74)	34.5* (8.18)
R^2	.293	.289	.071

a. t-statistics in parentheses.

*Denotes significance at the 90 percent level or better.

Table C.4
Effects of UI and Other Factors on Labor Force and Retirement Status of Married White Males Ages 65-67 in 1973, N = 941

	Percentage point change in the probability of being:[a]		
Factor	In labor force	Fully retired	Partly retired
Constant	11.1*	42.0*	20.4*
	(3.93)	(13.15)	(7.39)
Received UI 1972	15.1*	-23.2*	13.3
	(1.31)	(-1.86)	(1.23)
UI dollars 1972 (in thousands)	-22.7*	18.2*	2.6
	(-2.41)	(1.79)	(.30)
Spouse worked	7.3*	-8.2*	5.9*
	(2.51)	(-2.60)	(2.17)
Health limited 1971	-8.8*	11.1*	-3.3*
	(-3.30)	(3.84)	(-1.34)
Income 1970 (in thousands)	-.7*	.6*	-.2
	(-4.60)	(3.65)	(-1.18)
Completed high school or some college	2.7	-3.2	-1.0
	(.99)	(-1.10)	(-.40)
Completed college	14.3*	-12.1*	-5.0
	(3.05)	(-2.39)	(-1.14)
Employed 1971	47.0*		
	(18.06)		
Fully retired 1971		44.3*	-12.6*
		(14.59)	(-4.78)
Partly retired 1971		-1.2	25.5*
		(-.27)	(6.80)
R^2	.332	.279	.129

a. t-statistics in parentheses.

*Denotes significance at the 90 percent level or better.

The differences between the average UI recipient and the average nonrecipient in the probability of subsequent labor force participation are calculated as $\hat{\alpha}_1 + \hat{\alpha}_2 \overline{\text{UI\$}}$, where the (^) denotes the estimated values of the parameters, and the superior bar denotes the means of the variable among UI recipients. The estimated variance of this average effect is just:

$$\text{Var}(\alpha_2)\,\overline{\text{UI\$}}^2 + 2\cdot\overline{\text{UI\$}}\cdot\text{Cov}(\alpha_1\,\alpha_2) + \text{Var}(\alpha_1)\ . \qquad \text{(C-2)}$$

The estimates reported in footnote 10 in chapter 4 are calculated similarly, except different values of UI$ are used in place of its mean.

Because the predicted values of the dependent variables may lie outside the zero-one range in the formulation in (C-1), the estimates cannot be used if we wish to derive statistically proper comparisons of the adjusted differences in retirement probabilities between recipients and nonrecipients in the different subsamples. Thus the estimated impacts presented in table 4.4 are based on logit estimates of equations like (C-1). The estimation was done using a logit program developed by Peter Schmidt and discussed in Schmidt and Strauss (1975).

The logit coefficients for the two samples, and for the two age subgroups within each, are presented in tables C.5 and C.6. As can be seen by comparing them to the ordinary least squares estimates in tables 4.2, 4.3, and C.1 - C.4, the same variables are generally significant in the logit estimates. (Logit estimates for the probability of being fully retired were also estimated for the entire 1973 subsample, and the estimates did not differ qualitatively from those presented in table 4.3.) The differences presented in table 4.4 are calculated by substituting the sample means for the X_i and E_{-2} into the equations containing the logit parameters, and estimating then the difference in the probability that $L = 1$ when $\text{UI\$} = \overline{\text{UI\$}}$ and $\text{RECDUI} = 1$, as compared to when both are zero.

Table C.5
Logit Estimates of Labor Force Equations, Married White Males by Age, 1971

	Logit coefficients[a]		
Factor	**Total subsample**	**Ages 60-61**	**Ages 62-64**
Constant	-.925* (-3.66)	-.679* (-1.72)	-2.146* (-6.89)
Received UI 1970	.066 (.15)	-.513 (-.79)	.279 (.53)
UI dollars 1970 (in thousands)	-1.463* (-3.70)	-1.325* (-2.13)	-1.490* (-2.93)
Age 62 or older	-1.140* (-7.20)	--	--
Spouse worked	.392* (2.48)	.464* (1.59)	.363* (1.90)
Health limited 1969	-.833* (-5.27)	-1.560* (-5.55)	-.472* (-2.42)
Income 1968 (in thousands)	-.0063 (-.46)	.024 (.81)	-.018 (-1.15)
Completed high school or some college	.223* (1.36)	.193 (.62)	.229 (1.18)
Completed college	.573* (1.80)	-.173 (-.31)	.944* (2.40)
Employed 1969	3.471* (16.30)	3.351* (9.08)	3.528* (12.42)

a. t-statistics in parentheses.

*Denotes significance at the 90 percent level or better.

Table C.6
Logit Estimates of Labor Force Equations, Married White Males by Age, 1973

	Logit coefficients[a]		
Factor	Total subsample	Ages 62-64	Ages 65-67
Constant	-1.930*	-1.609*	-2.003*
	(-9.45)	(-2.90)	(-2.61)
Received UI 1972	.551*	-.334	-.902
	(1.33)	(-.66)	(-1.28)
UI dollars 1972 (in thousands)	-1.196*	-1.114*	-1.326*
	(-3.31)	(-2.63)	(-1.95)
Age 65 or older	-1.016*	--	--
	(-8.82)		
Spouse worked	.458*	.413*	.539*
	(3.58)	(2.55)	(2.53)
Health limited 1971	-.600*	-.556*	-.692*
	(-4.59)	(-3.31)	(-3.28)
Income 1970 (in thousands)	-.028*	-.001	-.067*
	(-3.17)	(-.10)	(-4.06)
Completed high school or some college	.215*	.186	.197
	(1.70)	(1.12)	(.99)
Completed college	.701*	.338	.118*
	(3.06)	(1.11)	(3.23)
Employed 1971	3.190*	2.920*	3.55*
	(17.44)	(12.39)	(11.93)

a. t-statistics in parentheses.

*Denotes significance at the 90 percent level or better.

The estimates on which table 4.5 is based come from an equation like (C-1) to which the following sum has been appended:

$$\gamma_0 \mathrm{MMC} + \gamma_1 \mathrm{RECDUI{\cdot}MMC} + \gamma_2 \mathrm{UI\$ {\cdot} MMC} \quad , \qquad \text{(C-3)}$$

where MMC equals one if the person's current or most recent job was in mining, manufacturing or construction, and zero otherwise, and the γ_i are parameters to be estimated. The adjusted relative differences reported in the first row are just the estimated γ_0 ; those in the second row are calculated as $\gamma_0 + \gamma_1 + \gamma_2 \overline{\mathrm{UI\$}}$, while those in the third row are $\gamma_0 + \gamma_1 + \gamma_2 (\overline{\mathrm{UI\$}} + 1)$, where UI\$ is the mean UI income received by beneficiaries in MMC industries. The standard errors of the estimated relative differences between the average UI recipient in MMC and elsewhere, upon which the t-statistics reported in table 4.5 in chapter 4 are based, are calculated exactly as are those based on equation (C-2), except that the γ_i coefficients are used, as is $\overline{\mathrm{UI\$}}$ for persons in MMC industries. The F-statistic on the set of three coefficients in (C-3) is .32, not significantly different from zero at conventional levels of significance in the 1971 subsample. In the 1973 subsample it equals 3.92, significant with the appropriate degrees of freedom at the 99 percent level. Finally, the effects of the other variables in (C-1) were not seriously changed by the deletion of persons for whom $E_{-2} = 0$ or by the addition of the terms in (C-3).

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